K-10
SOUTH LAWRENCE TRAFFICWAY
Project 10-23 K-8392-01

FINAL
Section 4(f) Evaluation

November 2007

Baker Wetlands

FINAL
Section 4(f) Evaluation

Proposed Improvement

K-10 South Lawrence Trafficway
from existing K-10/U.S. 59 Highway interchange east to a location on existing K-10 near the eastern edge of the City of Lawrence

Project No. 10-23 K-8392-01

Prepared pursuant to 23 U.S.C. 138 and 49 U.S.C. 303

by

The United States Department of Transportation
Federal Highway Administration
and the
Kansas Department of Transportation (KDOT)

11/1/2007
Date of Approval

For Federal Highway Administration

Based upon the considerations contained in this document, there is no feasible and prudent alternative to the use of land from the Haskell Agricultural Farm Property (HAFP), and the proposed action includes all possible planning to minimize harm to the HAFP resulting from such use.

Final Section 4(f) Evaluation
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FINAL
Section 4(f) Evaluation

A. Introduction

1. BACKGROUND

The following Section 4(f) Evaluation discusses the proposed improvements to the K-10 South Lawrence Trafficway (SLT) Corridor and the impacts to historic properties. Extensive planning efforts to avoid and minimize impacts have been conducted and are addressed in this document as well as potential mitigation and enhancement for the resource impacts.

The Federal Highway Administration, in cooperation with the Kansas Department of Transportation, plans to adopt an approved Final Environmental Impact Statement (FEIS) for the South Lawrence Trafficway located in Lawrence Kansas (see Exhibit 4f-1). The FEIS was prepared by the U.S. Army Corps of Engineers (as the lead Federal agency), Kansas City District, as part of a Section 404 Permit Application and it included the Section 106 consultation process of the National Historic Preservation Act. Because of possible Federal-aid highway funding for the project, the FHWA is completing the Section 4(f) process with a Final Section 4(f) Evaluation, and plans to issue a Record of Decision to complete the National Environmental Policy Act (NEPA) process.

2. GENERAL 4(f) PROCESS

The Section 4(f) legislation, as established under the U. S. Department of Transportation Act of 1966, as amended, (49 USC 303, 23 USC 138) provides protection for publicly owned parks, recreation areas, or wildlife and/or waterfowl refuges of national, state or local significance or land of an historic site of national, state, or local significance from conversion to transportation use. Section 4(f) also applies to all archaeological sites on or eligible for inclusion on the National Register of Historic Places (NRHP) and which warrant preservation in place. The Federal Highway Administration (FHWA) may not approve the use of publicly owned land of a publicly owned park; recreation area; wildlife and waterfowl refuge of national, state or local significance; or land of a historic site of national, state or local significance unless a determination is made that:

- There is no feasible and prudent alternative to the use of the land from the property; and
- The action includes all possible planning to minimize harm to the property resulting from such use (23 CFR 771.135).

Section 106 of the National Historic Preservation Act of 1966 requires that the lead Federal agency take the effects of federally-funded and permitted projects on historic properties into account, to coordinate these effects with the staff of the State Historic Preservation Officer (SHPO) and interested parties, and to avoid or mitigate any adverse effects on historic properties. Further, Section 106 requires that the lead Federal agency give the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such actions. Section 106 applies to properties that have been listed in the NRHP, properties that have been determined to be eligible for inclusion in the National Register, and properties that may be eligible but have not yet been evaluated. If a property has not yet been listed to the National Register or determined eligible for inclusion, it is the responsibility of the Federal agency

involved to ascertain its eligibility, following procedures spelled out in Advisory regulations (36CFR800.4(c), where the procedures and appropriate NRHP regulations are cited.

The National Register of Historic Places Criteria for Evaluation, as found in 36 CFR 60.4, include "the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and (A) that are associated with events that have made a significant contribution to the broad patterns of our history; or (B) that are associated with the lives of persons significant in our past; (C) that embody distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or (D) that have yielded, or may be likely to yield, information important in prehistory or history."

In previously completing the NEPA process, the U.S. Army Corps of Engineers (Corps) also completed the historic Section 106 process as part of the EIS process. It included a comprehensive and exhaustive consultation process. A screening process was employed to evaluate and arrive at a range of reasonable alternatives for the proposed project, including the no-action alternative. All the reasonable alternatives were evaluated in view of their impacts (effects) and possible mitigation measures for existing historic sites located in the project's area of effect. A Section 106 Memorandum of Agreement has been executed for the preferred alternative identified in the Corps' Final EIS.

3. PROPOSED ACTION

a. Project Background and History

Kansas Highway 10 indirectly connects the cities of Topeka and Lawrence with communities located in Johnson County, Kansas (see Exhibit 4f-1). This area is integral in the development of the future corridor from Topeka to Lawrence and to Johnson County Kansas. Topeka is the Kansas state capital and is a significant business and educational center. Lawrence and surrounding areas in Douglas County contain the University of Kansas and Haskell Indian Nations University (HINU) as well as other significant educational, business and cultural attractions. Johnson County's population and economy are the state's largest, with continued growth forecast for the foreseeable future. Lawrence and surrounding areas in Douglas County are also experiencing substantial population and economic growth. These three areas are economically and culturally linked, which contributes to the overall economic viability and cultural vitality of the region.

Kansas Highway 10 (two lanes west of Lawrence, four lanes east of Lawrence) is a primary route interconnecting Lawrence and Johnson County. Under current conditions motorists on K-10 Highway, whether traveling east from the K-10/I-70 interchange or west from Johnson County, must transition from a two or four-lane freeway to city streets at Lawrence. In addition to degrading the safety and efficiency of the regional transportation system, this condition contributes to congestion, pollution, and higher crash rates within the city of Lawrence.

Consideration of a bypass route around the city of Lawrence, to improve the flow of regional traffic and relieve congestion on Lawrence city streets, has been the subject of discussion and controversy for several decades.

The need for a bypass around Lawrence was first documented in 1964 in *The Lawrence Area Transportation Study*, conducted by the Kansas State Highway Commission and FHWA for the purpose of establishing a long-range transportation plan for the city of Lawrence. The Kansas Highway Commission prepared an update to its report in 1971 in which a number of specific routes were discussed.


N
2 0 2 4 Miles
Jackson
Jefferson
Leavenworth
Wyandotte
Shawnee
Perry Reservoir
Topeka
Kansas River
Kansas City
Lawrence
Proposed SLT (K-10)
Clinton Reservoir
Douglas
Johnson
Osage
Pomona Reservoir
Franklin
Miami
Hillsdale Lake
Freeways
K-10
Other Roads
Major Water Bodies
County Boundaries
Urban Areas
HNTB
K-10
SOUTH LAWRENCE TRAFFICWAY
EXHIBIT 4f-1
Overview Map

As the need for a bypass route increased, additional, more detailed studies were conducted. In September 1974 a draft environmental study addressing a proposed route was circulated for agency and public review and comment. The study did not proceed beyond the draft stage due to a lack of funding.

Douglas County and the city of Lawrence launched a local study in 1985 to evaluate construction of a bypass around the city, subject to state and federal funding. The Federal Highway Administration became the lead Federal agency for the study, and an EIS was completed in January 1990, with a Record of Decision issued in June 1990. The selected alternative was construction of a four-lane bypass (South Lawrence Trafficway) on the existing 31st Street located on the southern end of HINU property. Final design for construction of the bypass began in 1991. During the design phase, Douglas County applied to the U.S. Army Corps of Engineers (Corps) for a permit to authorize the work under authority of Section 404 and was granted a permit in February 1993.

In August 1987, FHWA placed the SLT on the Transportation Plan based on a recommendation from the Lawrence-Douglas County Metropolitan Planning Commission. The Commission's recommendation was based on its recognition that congestion in the area resulting, in part, from lack of an adequate connecting route for K-10 Highway was becoming increasingly problematic. The Federal Highway Administration's action made the SLT eligible for Federal funding.

Construction of the western section of the project began in 1993. A nine-mile-long section of the route was completed and opened to traffic from Interstate 70 to US-59 Highway in November 1996.

In July 1993, Douglas County and KDOT received a letter from the then president of HINU in which he expressed concern that the 1990 EIS had not addressed the impact of the highway on HINU property. Haskell Indian Nations University stated that the school's cultural traditions and spiritual sites were not addressed in the EIS, and that HINU's historical significance had not been considered.

In response to the issues raised by HINU, meetings were held with representatives of Douglas County, the state, and HINU's student body, administration, and Board of Regents. On October 27, 1993, the HINU Board of Regents requested that construction of the bypass cease until their concerns were addressed. In response to the Board of Regents' request, FHWA, KDOT, and Douglas County suspended all construction activities east of US-59. Construction activities west of US-59 continued.

On January 26, 1994, Douglas County presented HINU with 12 potential design and access enhancement proposals to address potential impacts identified by the HINU administration and its Board of Regents concerning expansion of 31st Street to a four-lane bypass. On January 27, 1994, the HINU Board of Regents rejected the County's proposed design changes and issued a resolution opposing alignment of the SLT along 31st Street. Haskell Indian Nations University stated that loss of wetlands on their property, as a result of the project, would negatively impact the school's academic programs. The school also stated that the adjacent wetlands were considered culturally and spiritually significant to the HINU community and that alternatives to the proposed 31st Street alignment should be explored.

FHWA, KDOT, and Douglas County determined that a Supplemental EIS should be prepared to address the new information submitted by HINU regarding its spiritual, cultural, academic, and development concerns. The Draft Supplemental EIS was completed in October 1995. The

Draft Supplemental EIS offered three alternatives for the bypass, which included alignments on 31st, 35th and 38th streets.

During the comment period on the Draft Supplemental EIS, FHWA assessed the project and determined that it was appropriate to separate the work into two different projects, each with reasonable points at which a highway project could be terminated and function independently (i.e., logical termini). In this case, the western leg of the SLT, from its intersection with US-59 Highway to its interchange with I-70 was one independent construction project. The eastern leg, from its intersection at US-59 Highway to K-10, was also one independent construction project. Given the fact that all federal funds allocated for the project had been spent on construction of the western leg of the SLT, and based on information from KDOT that they did not anticipate seeking additional Federal funding, FHWA determined that the eastern leg of the SLT was no longer Federalized and that their continued participation was no longer appropriate or necessary.

FHWA's decision to withdraw from the eastern leg of the SLT prompted a lawsuit[1] by several parties. The resulting court decision ruled that FHWA could not separate the SLT into two projects, the project could not be de-Federalized and that FHWA could not withdraw. Pursuant to this decision, FHWA, KDOT and Douglas County continued processing the Draft Supplemental EIS.

During the public review period for the Draft Supplemental EIS, attempts by various parties to achieve consensus on one of the three alignments were unsuccessful. Consequently, after publication of the Final Supplemental EIS in February 2000, a Record of Decision was issued by FHWA selecting the No-Action Alternative.

The traffic issues that prompted consideration of a bypass route around the city of Lawrence as early as 1964 have continued to grow in intensity. The traffic situation in Lawrence has deteriorated to a point where lack of an adequate connection between K-10 Highway east of Lawrence with I-70 west of Lawrence threatens the safety and efficiency of the state transportation system in the key corridor between Topeka, Lawrence, and Johnson County.

On May 8, 2001, KDOT provided the Corps with written notification that it was evaluating a proposal to relocate a section of K-10 Highway in the vicinity of the city of Lawrence, Kansas. The letter referenced Federal requirements that KDOT obtain a permit from the Corps, under authority of Section 404 of the Clean Water Act (Section 404), to authorize the proposed work, and requested that the Corps become the lead Federal agency for preparation of the environmental documentation required to ensure compliance with NEPA.

On July 26, 2001, the Corps agreed to become the lead Federal Agency for review and evaluation of KDOT's proposal in accordance with NEPA requirements. The Kansas Department of Transportation submitted a Section 404 permit application for the proposed work on July 29, 2002. The Corps had completed its initial review of the proposed work and had determined that the work would require authorization under authority of Section 404 and that issuance of the requested permit was likely to result in significant impacts to the human environment. The Corps' initial findings led to a conclusion that an EIS would be required in order to comply with the provisions of NEPA. The Corps completed the NEPA process with an approved Record of Decision in 2003. The FHWA plans to adopt the Corps' Final EIS, is issuing this Final Section 4(f) Evaluation, and plans to issue its own Record of Decision in accordance with the Council on Environmental Quality's regulations.

[1] Ross v. Federal Highway Administration, et al. 972 F.Supp. 552 (D.Kan. 1997)

b. Project Description

The Kansas Department of Transportation proposes to construct a new section of K-10 Highway in Douglas County, beginning at the existing K-10/US-59 Highway interchange in southwest Lawrence extending approximately six miles north and east to a location on the existing K-10 alignment near the eastern edge of the City of Lawrence. The proposed new road section would replace the existing K-10 Highway route through Lawrence with a direct, limited access, freeway connection along the southern edge of the city. The project study area is shown on Exhibit 4f-2. The project is designated by the state as KDOT Project No. 10-23-K8392-01, and is generally referred to as the SLT.

The proposed project includes:

- Acquisition of right-of-way
- Construction of a four-lane divided freeway with access limited at interchanges
- Construction of grade-separated interchanges
- Additional on and off-site mitigation features

c. Purpose and Need

Summary

The K-10 Highway connecting link within the city of Lawrence is located on US-59 and 23rd Street and is heavily congested due to high traffic volumes, poor access management and insufficient capacity. This situation is predicted to continue to worsen as travel demand in the K-10 Highway corridor increases. The deficiencies of the connecting link degrade the performance of the regional transportation system and contribute to unsafe, congested and inefficient conditions both in the regional system as well as on Lawrence city streets serving local traffic needs.

The purpose and need for the proposed project is to provide a safe, efficient, environmentally sound and cost-effective transportation facility for users of K-10 Highway and the surrounding state highway system and, to the extent possible, to alleviate congestion on Lawrence city streets.

Traffic Volume, Capacity and Access Control

The present routing of K-10 Highway through Lawrence on city streets creates unacceptable driving conditions due to insufficient capacity of the connector route and inadequate access control.

A number of factors contribute to the safety and efficiency of a road. One of those factors is the capacity of a road to carry the volume of vehicles that use it. As volume exceeds the capacity of a road, drivers experience congestion and delays. The capacity of 23rd Street and US-59 along the K-10 Highway connector route is estimated to be 33,300 vehicles per day (vpd). In ideal circumstances, that total is the maximum number of vehicles that these roads could be expected to handle over the course of a day without significant congestion and delays. Volumes on the K-10 Highway connector route range from 20,820 to 26,590 vpd on south US-59 to 31,610 to 34,845 vpd on 23rd Street. Forecasts for the year 2025 predict a daily volume on these sections of US-59 and 23rd Street ranging from 37,000 to 53,200. While portions of the city route already exceed capacity and are experiencing the consequent congestion and delays, the entire route will exceed capacity in the coming years. Exhibit 4f-3 shows the existing and predicted year 2025 levels of service for US-59 and 23rd Street.

A second factor contributing to the safety and efficiency of a roadway is the degree and quality of access control. Points of access, such as parking lot entrances, street intersections and private driveways create opportunities for congestion and accidents (crashes). For most of its route, K-10 Highway is a four-lane, limited access freeway. At Lawrence, however, 23rd Street and US-59 are four-lane urban arterial roadways with multiple local intersections, traffic signals, stop signs, private driveways and parking lot entrances. Limited access control exists on US-59 south of 23rd Street and on 23rd Street west of Harper, resulting in frequent access to the route and, consequently, a high number of conflict points.

The poor access control exacerbates existing problems caused by high traffic volumes, which means that 23rd Street and US-59, by virtue of their present design, are unacceptable replacements for a direct, limited access freeway connection for K-10 Highway at Lawrence. Accordingly, in order to meet the project's purpose and need, an alternative must offer a direct, limited access connection capable of handling Year 2025 predicted traffic volumes while alleviating the burden on Lawrence city streets to carry traffic that should more appropriately be using the state highway system.

Origin and Destination Survey

A key step in defining and analyzing traffic problems in the K-10 Highway corridor was completion of an origin and destination (OD) survey, conducted by KDOT in the vicinity of Lawrence between June 12 and June 14, 2001. The purpose of the survey was to better understand existing travel patterns through Lawrence and eastern Kansas. Data gathered through the OD survey helped study personnel understand why individuals travel through this corridor, where they are going, how frequently they travel, and what route they select. Information was also gathered that contributed to development of a Lawrence Travel Demand Model, which is the basis for forecasting future travel demand in the area.

Study personnel were located at eight stations around the periphery of Lawrence to pass out mail-back cards to motorists. The survey cards asked motorists questions related to their travel. During the survey, 51,554 cards were distributed to motorists. Of that number, 12,621 cards (24 %,) were returned. The number of cards returned and analyzed represented 11% of the average daily traffic on the route.

In summary, the survey found that:

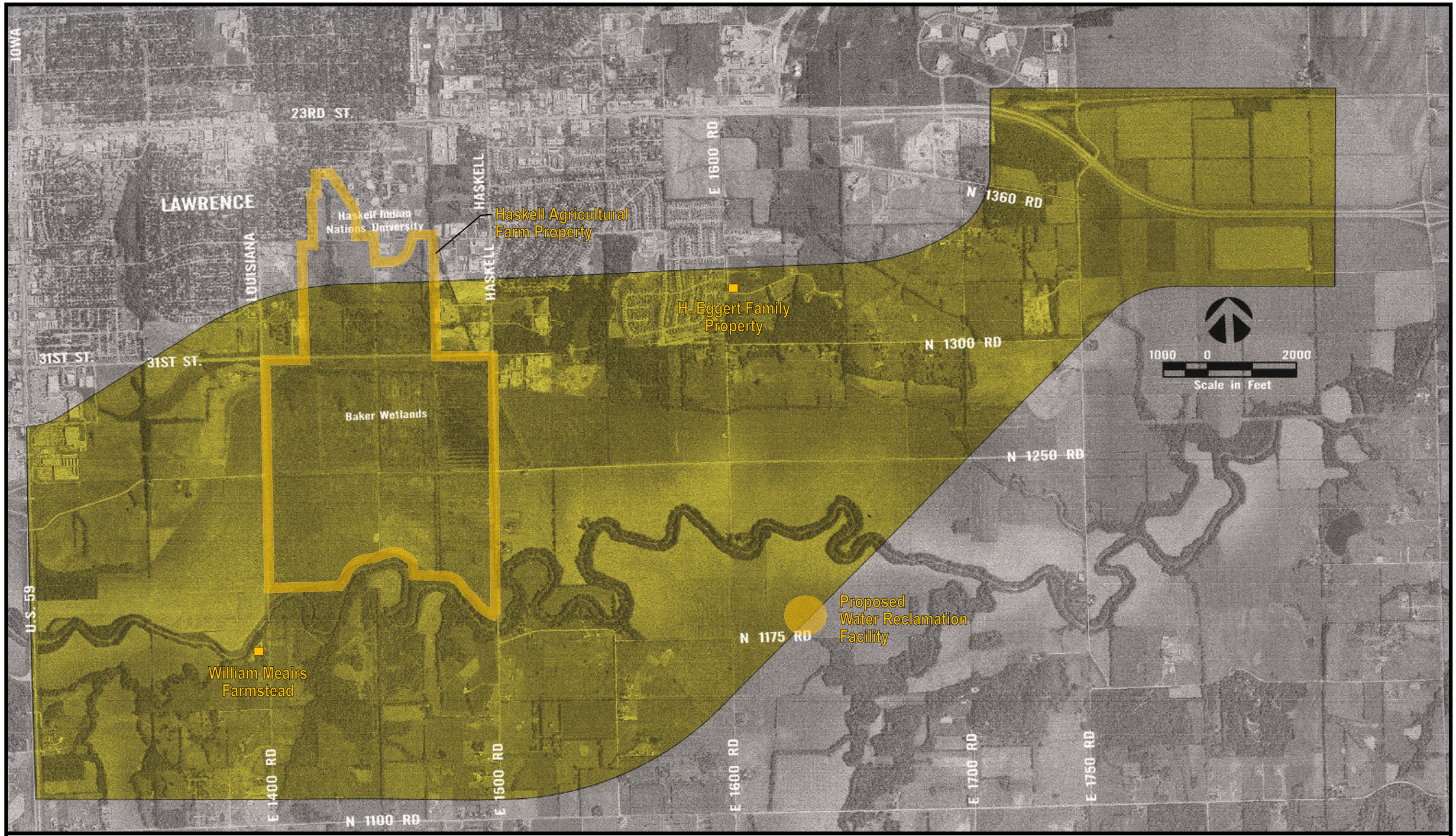
- The most common trip purpose (49%) was identified as "to or from work."
- 48% of the vehicles surveyed are making the same trip five or more times per week.
- 30% of the surveyed trips were motorists passing through Lawrence – these trips were not originating from or destined for Lawrence.

The OD survey was a key component in estimating future travel demand and behavior in the corridor and in establishing the corridor's importance to the economy of the region.

Safety

Insufficient access control and existing and future traffic volumes in excess of the capacity of 23rd Street and US-59 create unsafe conditions on the K-10 Highway connecting link.

Accident (crash) rates for the city streets used as a K-10 Highway connection – specifically the section of US-59 between the K-10 Highway/US-59 Highway interchange and 23rd Street, and the section of 23rd Street between US-59 and Haskell Avenue – exceed the statewide average for similar facilities. Exhibit 4f-4 shows accident rates on these sections of roadway compared to statewide averages and illustrates that accident rates along the connecting route are significantly higher than statewide averages.



LEGEND

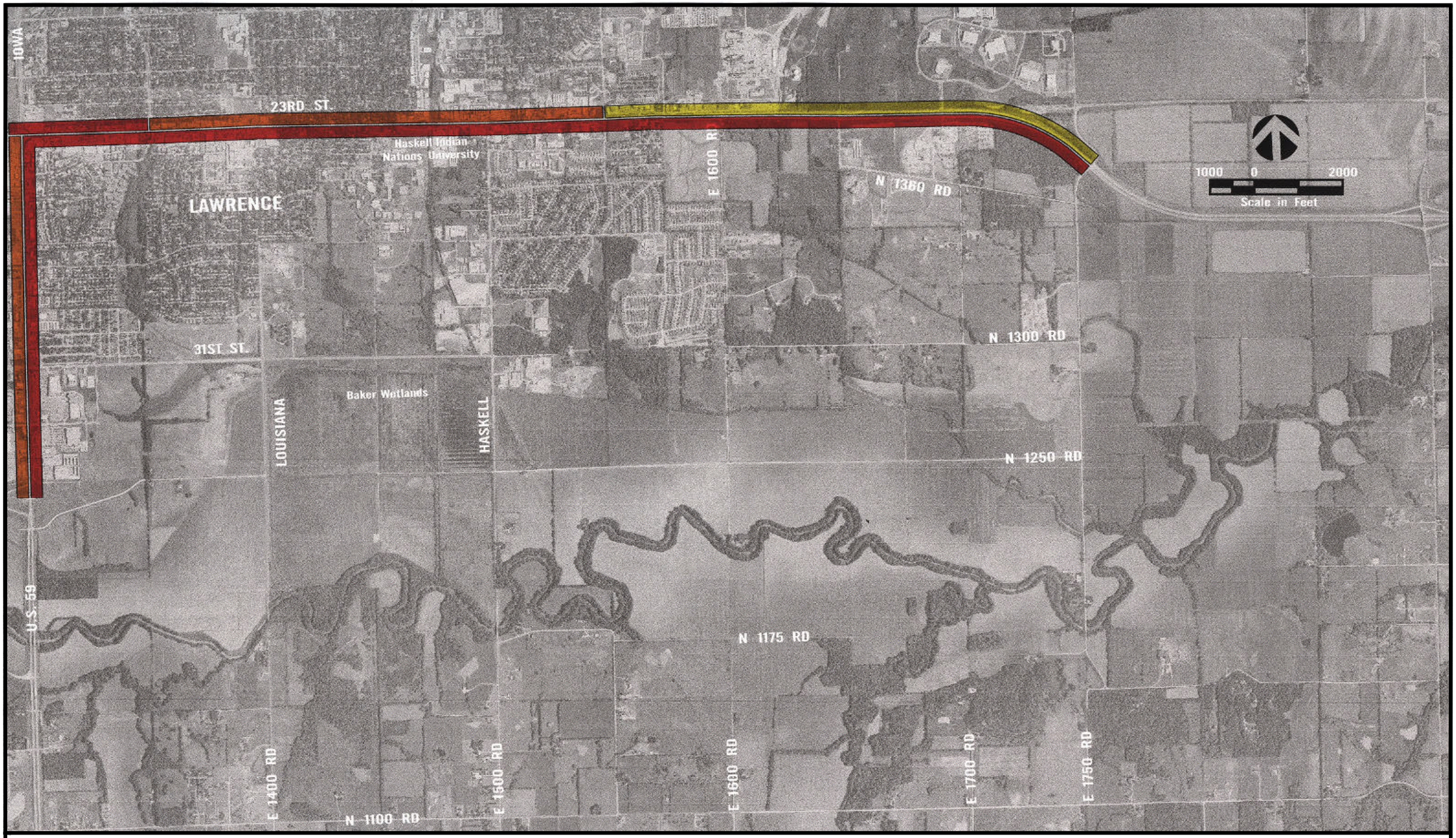
Study Area

12/05/02 Revised 08/18/06

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-2
Project Study Area and Area of Potential Effect (APE)



LEGEND

LEVEL OF SERVICE (LOS)

- LOS A, B and C
- LOS D
- LOS E
- LOS F

- **A** Free Flow, 60 mph or greater
- **B** Stable Flow, above 50 mph
- **C** Stable Flow, below 50 mph
- **D** No Traffic Congestion, 40 mph
- **E** Some Delays at Peak Hours, 30-35 mph
- **F** Stop and Go Operation, below 30 mph

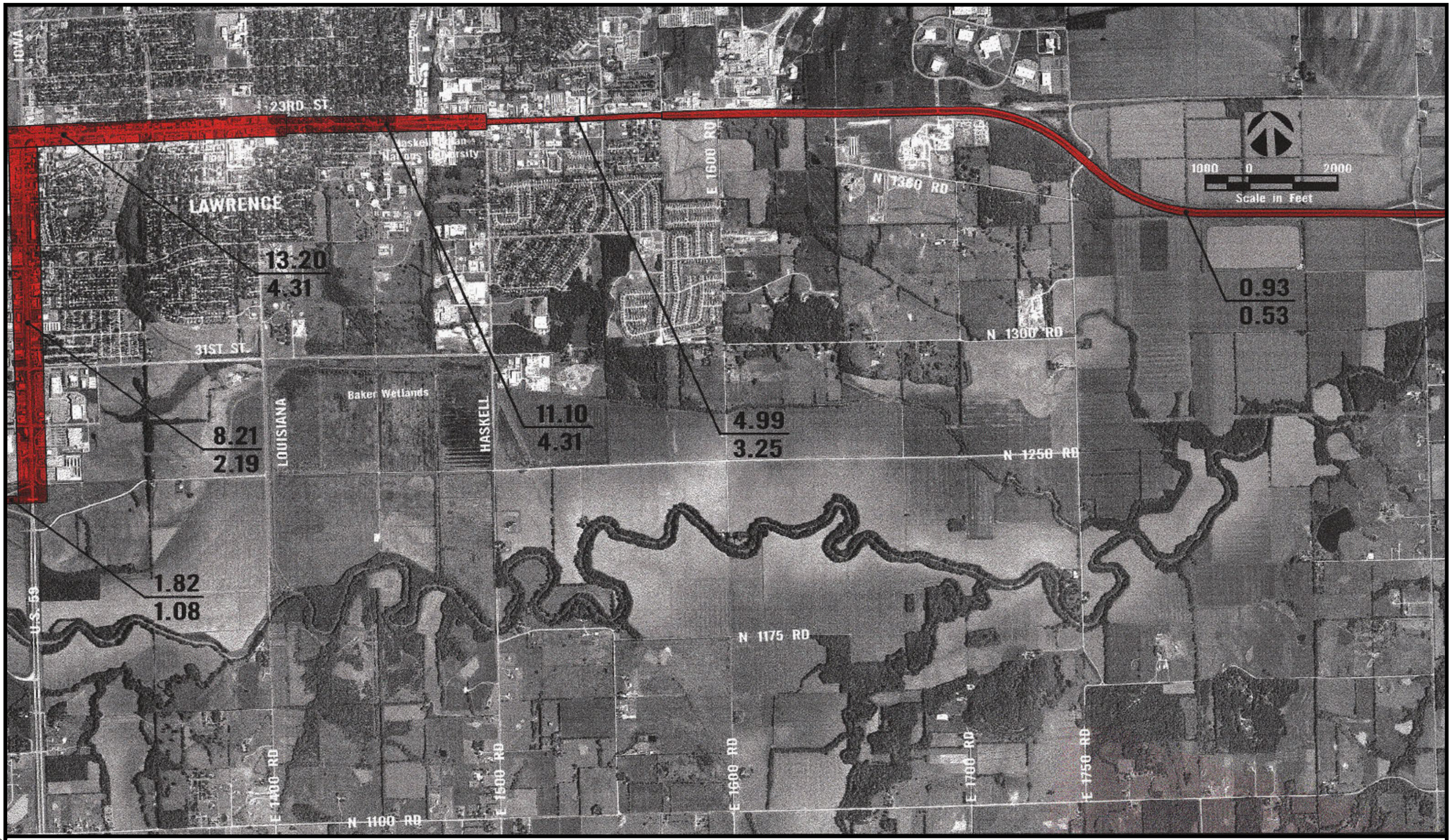
Year 2001 — Year 2025

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-3
Traffic Level of Service

12/05/02 Revised 08/18/06



LEGEND

Percentage Below | Percentage Above

400% 200% 100% 50% 50% 100% 200% 400%

1996-2000 Crash Rate*
Statewide Average Crash Rate
for Similar Facilities

*Rate = Average Annual Number of Crashes
Per 1,000,000 Vehicle Miles of Travel

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-4
Crash Rate Comparison

04/15/02 Revised 08/18/06

The following table further illustrates the problem.

Table 1 – Accident (Crash) Rates

Statewide Average accident Rate for Four-lane Urban Freeways (accidents per million vehicle miles)	1.34
Accident Rate on US-59	8.21
Accident Rate on 23rd Street	0.93 – 13.20

The large number of conflict points and growing traffic volumes on these streets has led KDOT to conclude that K-10 Highway traffic will experience even higher accident rates on the existing connecting link in the future. The Kansas Department of Transportation's analysis indicates that completion of the proposed bypass would result in an average reduction of between 74 and 140 accidents per year for through-traffic on K-10 Highway.

In order to meet the purpose and need statement, an alternative must provide a safe facility as measured by capacity and access control. The alternative must yield a predicted collision rate at or below the statewide average for similar facilities.

Survey of Area Residents

Additional data regarding traveler's experiences and decisions were collected in January 2002, when KDOT conducted a telephone survey of a stratified random sample of 1,200 households in the region. The survey was designed to gather statistically valid input from residents concerning issues and experiences related to traffic in the region and development of a freeway bypass on the south side of Lawrence. The survey sample included residents from the cities of Lawrence and Topeka as well as others living in Douglas, Shawnee and Johnson counties. In summary, the survey found that:

- 43% of respondents had used the K-10 Highway connecting link to drive through Lawrence on their way to and from locations outside of Lawrence.
- 73% of those surveyed rated traffic flow on the K-10 Highway connecting route in Lawrence as fair or poor.
- 51% of those surveyed who traveled on K-10 Highway through Lawrence for the last five years thought that the route had become increasingly unsafe.
- 70% of those surveyed indicated that driver safety should be a top consideration in selecting an alternative route; 44% thought relieving traffic congestion should be one of the critical deciding factors; 26% indicated that preserving wetlands and environmental values should be a key consideration; and 19% thought that preservation of Native American culture should be a critical factor.
- 78% of those surveyed were either "very" (57%) or "somewhat" (21%) supportive of the development of the new roadway.

The telephone survey supplemented data collected through the OD survey and provided further insight into the issues and concerns of residents in the region. The findings of the telephone survey assisted KDOT in refining its understanding of the issues and the needs of its constituents.

4. NEW INFORMATION

Since the approval of the Corps' Final EIS, new developments regarding a planned wastewater reclamation facility and a change to the boundaries of the City's Urban Growth Area have occurred.

Wakarusa Water Reclamation Facility

A new water reclamation facility will possibly be located within the Area of Potential Effect. The City of Lawrence, in order to serve an expanding population while maintaining the community's quality of life, is implementing one of the major recommendations of the "2003 Wastewater Master Plan." This project is the construction of a water reclamation facility along the Wakarusa River.

The master plan evaluated projected growth of the Lawrence area and the impact that growth would have on the existing wastewater collection and treatment facilities. It was determined that the existing plant is nearing capacity and could not handle future flows. Additionally, the problem of interceptor capacity also dictated that it would be impractical to continue expanding the existing plant. The decision was then to construct a second plant along the Wakarusa River which would discharge into the river rather than into the Kansas River as does the existing plant. Studies undertaken in 2006 indicate that the most feasible location would be just south of the Wakarusa River and one or two miles east of Haskell Avenue (see Exhibit 4f-2). The planning for the site consists of a 60-acre mechanical treatment plant with a buffer area of about 1000 feet on all sides. Total area for the facility is expected to be 300 to 350 acres.

The initial phase of the plant will be to relieve pressure on not only the existing treatment plant but also on the Four Seasons holding basin, the Haskell pump station and force mains just north of the Wakarusa River. This first phase will serve western sections of Lawrence and will in later years be a means to treat sewage due to population growth south of the Wakarusa. The new Wakarusa Water Reclamation Facility is expected to be operational in 2011.

Horizon 2020

Horizon 2020 is the comprehensive land use plan for the City of Lawrence and the unincorporated areas of Douglas County. Since the adoption of Horizon 2020 by the Lawrence/Douglas County Metropolitan Planning Commission, there have been amendments to the plan as warranted by changing needs. One of the most notable changes, as it relates to this project, has been to the boundaries of the Urban Growth Area (UGA).

Horizon 2020 places most of the area impacted by the proposed SLT in Service Area 4 of the UGA. The service area has not changed with amendments to the plan. However, the UGA has been extended south of the Wakarusa River with an amendment that was adopted in January, 2004. This amendment to *Horizon 2020* extends the UGA south to a point between North 1000 Road and North 900 Road. This is a large area and was previously identified as rural and not to be considered for inclusion in Service Area 4 until "access to a municipal wastewater treatment system is planned or under development to serve the area." (See discussion on Wakarusa Wastewater Treatment Facility). The original UGA boundaries were a factor considered by KDOT in its selection of a Preferred Alternative north of the river and by the Corps' Kansas City District in its identification of a Selected Alternative.

In addition, other amendments to *Horizon 2020* included Major Thoroughfare Maps that show the addition of the 32nd Street B alignment as a future freeway in the transportation system.

Transportation 2025 and 2030

Transportation 2025 (a federally mandated document) is the Long Range Transportation Plan for the City of Lawrence and surrounding lands that are under the jurisdiction of the Lawrence/Douglas County Metropolitan Planning Office (MPO). Through the plan, the MPO is required to "evaluate the transportation deficiencies of the current system, plan for future transportation needs, develop a fiscally restrained plan with adequate alternatives, and further

the development of an intermodal transportation system". During preparation of the Corps' EIS, the *Transportation 2020 Plan* was in place, which designated that the proposed SLT alignment be located on 31st Street. Since then, *Transportation 2025* was approved and is currently being revised and updated for 2030. The preliminary *Transportation 2030* study has not yet been presented to or approved by the MPO. *Transportation 2025* and the preliminary *Transportation 2030* study both include the 32nd Street Alignment B Alternative as a "Freeway", and include the addition of the area south of the Wakarusa River in the UGA. In the preliminary *Transportation 2030* study, there are some very minor changes to the future land use plan in the area south of the river (compared to future land use in *Transportation 2025*), however, most of it is still designated as low density residential.

Area Highway Projects

During preparation of the Corps' EIS, improvements to US-59 Highway between the cities of Lawrence and Ottawa were under study, but had not yet been approved. The Corps' FEIS stated that the proposed US-59 improvements were considered in traffic analyses performed for the SLT, and that there were no significant adverse cumulative impacts identified. Since that time, an FEIS for widening US-59 to four lanes has been approved and construction has begun in Franklin County (to the south of Lawrence).

The City of Lawrence is proposing an extension of 31st Street from Haskell Avenue east to O'Connell Road, with future improvements to continue east to Noria Road.

Figure 3. 35th Street at Center of Baker Wetlands - Looking West.

Figure 4. 35th Street at Center of Baker Wetlands - Looking East.

Figure 5. Looking West from South End of Baker Wetlands near Wakarusa River.

Figure 6. Looking East from South End of Baker Wetlands near Wakarusa River.

Other features located in the Baker Wetlands include the following:

- A boardwalk (approximately 850 linear feet), interpretive kiosk, and two shallow pools located on the south side of the northern dike, just west of the middle north-south road.
- A 15-acre virgin wetland prairie located at the southwest corner of the intersection of E 1500 Road (Haskell Avenue) and 35th Street.
- A wildlife observation blind located on the south side of 35th Street, approximately 650 feet east of the middle north/south road.

f. Function and Usage of the Baker Wetlands

The property known as Baker Wetlands (573 acres), was transferred to Baker University in 1968. Since assuming responsibility for the land, Baker University has developed the property into high quality man-made wetlands. The University converted the area from farmland to floodplain wetlands through a series of grants and University funds and has an ongoing enhancement and maintenance program for the wetland site. The school uses the area for research purposes in its Biological Sciences program (including plant and wildlife education, as well as bird watching) and has made the area accessible to the public. A history of these efforts is included in Appendix A.

Baker Wetlands provides Baker University with a site for both formal research and outdoor classroom work for general environmental studies. The University's records show that from 1989 to 1994 instructors, students and others have logged approximately 10,000 hours in academic activities associated with the site. The records show that usage of the area increased markedly in each of the academic years during that period.

Research activities include, but are not limited to, studies of the site's biological communities which include vegetation, fish, amphibians, reptiles, birds and mammals. One of the more significant research activities associated with the site has been a large-scale re-hydration and ground water monitoring program to demonstrate that high quality wetlands can be created through careful planning and management.

The University of Kansas and Haskell Indian Nations University (HINU) also carry out research and educational activities in the wetlands. Haskell cooperates in that program, also utilizing for its research and educational programs the portions of wetlands on the southern portion of its campus (just north of 31st Street).

(The text that follows contains excerpts from a document titled *All Things Are Connected,* dated December 23, 1994. This document was prepared by Haskell Indian Nations University as a response to the 31st Street Alignment, which was the Preferred Alternative of the 1990 EIS.)

One of the missions of HINU is to preserve Native American culture and traditional knowledge. This knowledge and philosophy, which is based on adaptation to nature and living within the environment, includes detailed empirical knowledge of North American plant and animal species and ecosystems, knowledge which is valued by contemporary scientific researchers. This knowledge is transmitted not only through oral communication, but also through laboratory exercises that are conducted on school property in wetlands located adjacent to 31st Street on the southern edge of the campus.

In laboratory exercises, called discovery labs, Native American elders are invited to biology and botany classes to teach tribal knowledge of plants. The discovery labs are based on National Science Foundation curriculum recommendations. The labs help demonstrate the interdisciplinary links in studies of the environment encompassing historical, ecological, cultural, and biological aspects, and integrate native knowledge in areas of ecology, ecosystem cycles, use and cultivation of plants, and wildlife. The wetland field labs expand students' appreciation of the interconnections of living organisms and relate the interconnections to native concepts and knowledge of the earth.

Discovery labs also enhance learning by allowing information to be presented in the context of the Native American experience. Courses in biology, botany, ecology, zoology, and natural resources management include exploration of contemporary Native American issues in the scientific and technical realm, as well as perspectives on resource management and the environment that require higher level interpretation skills and application of scientific knowledge.

Haskell Indian Nations University is one of a few universities that have wetlands on the main campus. This resource has been used not only in classroom activities, but also in research activities. Research studies at HINU include a National Science Foundation funded Environmental Biology/Undergraduate Research Experience grant awarded to HINU and the University of Kansas in 1993; cooperative research studies with the University of Kansas and Cornell University; and numerous other biological, ecological and chemical studies on various plants and animals. These studies not only have the potential to further science, but also foster students' observational skills and provide a unique forum for conveying Native and other cultural traditions.

Haskell Indian Nations University believes that the caretaker role of Native Americans demands that environmental education be at the center of the curriculum. Native teachings concerning environmental relationships provide a basis for numerous course offerings at the school. HINU indicates that in a typical year approximately 600 HINU students are involved in courses that use the wetlands complex. Haskell Indian Nations University considers its southern campus and the wetland complex to be the most valuable instructional facility on and off the campus, and believe it is important to protect it for future generations.

The Baker Wetlands area was closely associated with Haskell's history from its earliest days until at least the 1930s when farming was terminated as a part of the vocational training at Haskell. It is well documented in accounts by former students that occasional use for meditation and recreation continued after that time and this use continues today.

2. WILLIAM MEAIRS FARMSTEAD

The Meairs Farmstead is a property eligible for listing on the National Register of Historic Places due to its architecture, condition and association with the agriculture of Douglas County, Kansas. This property is located on the west side of E 1400 Road, immediately adjacent to the 42nd Street Alignment A.

The following description of the Meairs Farmstead is an excerpt from a report titled *Phase II Investigations South of and Adjacent to the Wakarusa River Associated With the K-10 South Lawrence Trafficway South of Lawrence in Northern Douglas County, Project Number 10-23 K-3359-01,* by Timothy Weston, Ph.D., Highway Archaeologist, Kansas State Historical Society, dated August 15, 2001. This report is included in the South Lawrence Trafficway Final EIS, Volume 2, Appendix A-11.

This site consists of an occupied farmstead located both sides of the Wakarusa River on the west side of E 1400 Road. The farm's main feature is a two-story stucco-covered house, with a sign over the east-facing porch which says "Meairs Farmstead 1854". There is a concrete well house/shed immediately west of the house, along with a garage and several other out-buildings. The owner has a number of historical documents related to the property, dating back to the Territorial Period. They include a photograph of the farm's first house after it had been moved to the area occupied by the present garage.

This farmstead has been held by one family since settlement in 1854, and the house was partially burned by Quantrill's Raiders during their retreat from Lawrence on August 21, 1863. The original house was moved to where the garage is now located when the present house was built in 1878. This original house was torn down in the 1920s, leaving no standing structures associated with the Territorial Period or the Quantrill Raid. The present house has very thick walls, suggesting stone construction, and is covered with stucco.

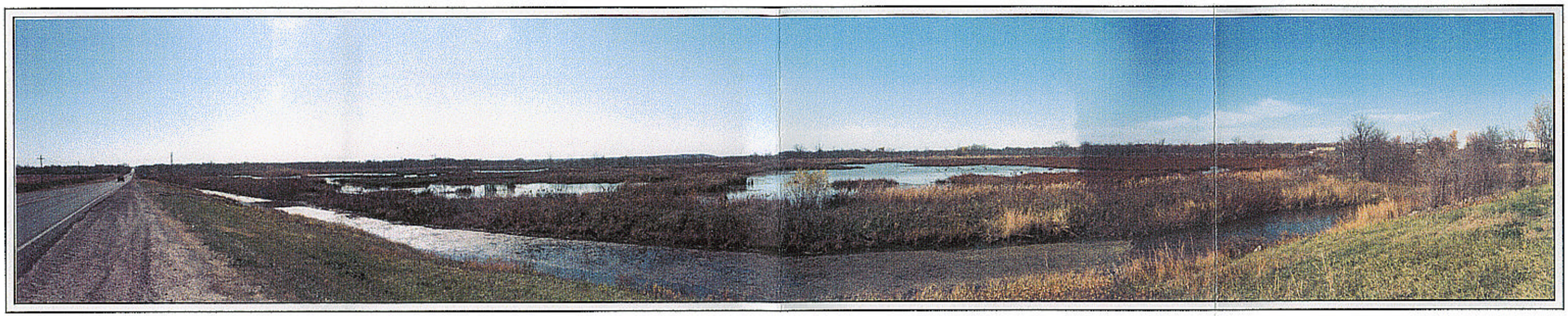


Figure 1. View of Northeast Portion of Baker Wetlands from Haskell Avenue (South on Left, West in Center and North on Right).

Figure 2. View of the Eastern Portion of Baker Wetlands, Looking West along 35th Street at Left, North along Eastern Boundary at Right.

B. Section 4(f) Properties

As discussed in the introduction, Section 4(f) provides protection for publicly owned parks, recreation areas, or wildlife and/or waterfowl refuges of national, state or local significance or land of a historic site of national, state or local significance from conversion to transportation use. The SLT corridor contains two historic properties that are eligible for listing on the National Register of Historic Places: the Haskell Agricultural Farm Property and the William Meairs Farmstead.

1. HASKELL AGRICULTURAL FARM PROPERTY

This area includes the lands historically associated with Haskell Institute's outlying agricultural training areas. The Haskell Agricultural Farm Property consists of the upper fields on the current campus and north of 31st Street, as well as the Wakarusa River flood plain area south of 31st Street and now known as the Baker Wetlands, a National Natural Landmark. Most of the Baker Wetlands area is owned by Baker University, but there are two parcels in the northeast corner, one owned by the University of Kansas, and the other owned by the Kansas Department of Wildlife and Parks. The lower fields, now the Baker Wetlands, were used by Haskell from its founding in 1884 to 1934. In 1934 the agricultural education program at Haskell was ended, and the lower fields were leased to local farmers. These lower fields were declared surplus property in the early 1950s and eventually deeded to Baker University in 1968. The Quit Claim deed required that Baker use the property for education, research and restoration to native habit (Wetlands). The deed required that these provisions be continued for 30 years at which time the property would be free and clear. These conditions were met in 1998 and Baker received a clear title from the U.S. Real Property Office.

a. History of Haskell Indian Nations University and the Baker Wetlands

Much of the following text relating to the history and existing facilities of the HINU campus and Baker Wetlands includes excerpts from a separate report titled *Documentation and Recommendations Concerning Determination of Eligibility for the National Register of Historic Places of Haskell Indian Nations University and the Baker Wetlands, Douglas County, Kansas* dated December 2001, and prepared by Brockington and Associates, Inc.

The Haskell Indian Nations University was originally known as Haskell Institute, which opened its doors to students in September 1884. Beginning two years earlier, the citizens and businesses of Lawrence had raised money through donations and bought 280 acres for the school. This land was on the south side of the city (south of 23rd Street); it was flood plain of the Wakarusa River and adjacent uplands.

The school was intended as a boarding institution for Indian students generally in the age range of first graders through fifth graders, although younger and older students were common. In a few years, upper (including high school range) grades were added. The curriculum was focused on learning to speak, read, and write English; on a general liberal arts introduction; and on vocational training. Both girls and boys were accepted. By January, 1885, students included 219 boys and 61 girls. Girls' vocational training centered on sewing, cooking, and household arts (including processing much of the farm's milk into butter and cheese). Boys were guided largely into agricultural training, with some training in construction, plumbing, blacksmithing, wagon making, and leather work. Many boys worked in agriculture, including crop production or in dairying (this was the predominant vocation in America, especially in the Midwest and West).

The "Haskell farm" was initially developed in 1883 and 1884 along with the buildings and school grounds so that the farm would be ready for students as they entered in the fall of 1884. A local farmer was hired as the first staff member to plow and plant crops and gardens in the spring, to supervise construction of the barn, outbuildings, and fences, to plant orchards, and to begin

assembling a dairy herd. In the 1880s and 1890s, additional land was purchased, and additional buildings were added, including horse and dairy barns. Electric lights were installed in the 1890s, including dorms by 1897.

In the 1880s and 1890s, the Haskell farm was focused on the upland areas, generally north of where 31st Street is today, because of the wetland nature of the bottom lands and the frequent flooding of the Wakarusa River. Although the bottom lands could be used for pastures and hay production, their drainage to increase land available for crops was a goal of the Superintendents from the earliest years. Federal appropriations for drainage projects, however, were not available until the early 1900s, and the small measures used to provide flood protection and drainage were not very successful.

In 1919, after approval of significant funding, regular drainage improvements, including dikes and canals, were underway. Dikes were constructed adjacent to the Wakarusa to slow over bank flooding there, and along the northern and western edges of the bottom lands. Canals were dug outside the northern and western dikes to assist removal of runoff from upland streams. Water control gates were placed in the dikes to allow water in when needed. A central large canal, running north-south, was constructed to provide water when necessary but primarily to drain the diked-in area directly south to the Wakarusa.

By the 1920s, the bottom lands were actively cropped, although some areas (probably because of continued drainage problems) remained as primarily grass and hay fields. Major floods from the Wakarusa still greatly affected farming in the bottom lands and required repair of the dikes, canals, and water control gates after each flood, but the decade of the1920s was probably the most productive period for the Haskell farm.

In the 1930s, vocational training in farming was discontinued by Haskell; Shifts were made toward a more academic curriculum, with vocational training being adjusted to reflect industries of the day. Agricultural vocational training was transferred from Haskell to the Bureau of Indian Affairs (BIA) Chilocco School in Oklahoma. Portions of the former agricultural fields were leased to local farmers, primarily for hay production. By the 1950s, the bottom land areas (now known as the Baker Wetlands) were transferred by the BIA to other federal agencies and finally given to Baker University, a local private college, in 1968. Baker University worked to return the area to wetlands by breaching dikes, damming drainage ditches, and plugging drainage tiles. Baker University professors and students planted marsh grasses and other vegetation, and allow water-tolerant trees to grow in certain areas. In 1969, the Department of the Interior designated the Baker Wetlands a National Natural Landmark (see Exhibit 4f-5 for boundaries). The area today is returning to a wetland probably similar to the era prior to pioneer settlement and clearing in the mid-1800s. Today Baker University carries out field research and education programs in wetlands biology.

From the 1950s to the present, Haskell evolved rapidly. In the 1950s it was primarily a high school; during the 1960s most courses were post-high school, and it was renamed Haskell Indian Junior College in 1970. The name was changed again in 1992 to Haskell Indian Nations University, recognizing Haskell's accreditation as a four-year university which granted baccalaureate degrees in a number of academic areas. Today, Haskell is the only all-Indian university in the nation. It is administered still by the BIA, with an advisory Board of Regents appointed by tribes (in geographic regions) throughout the nation. Many of Haskell's programs include strong Native American perspectives within academic history, arts, and science curricula.

Also, from the 1950s to the present, there has been development and redevelopment of the campus and its facilities. The earliest buildings are now all gone, destroyed by demolition or fire over the years. In 1961 the National Park Service listed the remaining historic buildings (from

the early 1900s) as a National Historic Landmark (NHL) because of its importance to national events in American history. This listing as a National Historic Landmark and a National Register property recognized that there was significant modern infill between the historic buildings, and that therefore the entire campus was not defined as a historic district. This National Register and NHL listing defines buildings on the HINU main campus, approximately 3000 feet north of the northern edge of the Baker Wetlands area.

b. Identification, Location and Size of the Haskell Agricultural Farm Property

The Haskell Agricultural Farm Property was identified during archival and field research carried out through several studies in the late 1990s. Studies also included oral interviews, public meetings, and extensive consultations with Haskell students, faculty, administrators, alumni, and the University's Board of Regents. The Kansas City District of the Corps of Engineers, in consideration of a permit for the project, undertook extensive consultations in 2001 and 2002 with the Kansas State Historic Preservation Officer and with expert consultants, individuals at public meetings, and numerous others who contacted District officials during the development of the Environmental Impact Statement.

The Kansas City District also coordinated closely with other Federal agencies, including the National Park Service, and the Bureau of Indian Affairs. Several meetings and conference calls were convened with the Washington and Denver offices of the Advisory Council on Historic Preservation to discuss concerns of the public and various organizations, findings of studies and consultations, and procedures for appropriate consultation with tribes and other interested parties. The Kansas City District closely followed suggestions by Advisory Council staff. In 2001 and 2002, over 500 tribes were contacted by mail and telephone, and all requests for meetings were honored by the District Engineer, by hosting meetings in the study area or by his traveling to several tribal headquarters. These meetings and contacts focused on consideration of the tribes' knowledge and beliefs about the Baker Wetlands portion of the former Haskell land.

Studies, interviews, and consultations focused on several issues:

- Should the lower fields area (now Baker Wetlands) be considered a spiritually significant property now eligible for the National Register as a traditional cultural property?
- Were there burials of Haskell students within this area?
- Was this area historic? If so, were historic features still present that would qualify the area as eligible for the National Register?
- If National Register eligible, what should the boundaries of the historic property be?

A separate document prepared in 2001 (titled *Documentation and Recommendations Concerning Determination of Eligibility for the National Register of Historic Places of Haskell Indian Nations University and the Baker Wetlands, Douglas County, Kansas,* dated December 2001, and prepared by Brockington and Associates, Inc.) summarized the findings of previous studies and of research directed at the above questions. One of the conclusions stated in the report was that *"….the likelihood of disturbing human burials in the wetlands along a future alignment of the South Lawrence Trafficway is extremely low".* The report also noted that there was no historical indication that the area was ever considered a spiritual or religious property.

The Baker Wetlands area was recommended as a historically significant property, however, because of its integral association with Haskell Institute. Although there had been significant changes to the property since its release from Haskell control in the 1930s, especially since its conversion back to wetlands by Baker University beginning in the 1960s, there still existed structures and features on the landscape representing the 1919 drainage improvements. Field usage patterns from the 1920s and 1930s could still be seen, along with portions of dikes and

drainage canals. These features provided sufficient links to the past, historic landscape, it was recommended, to qualify the property as eligible for the National Register. The Kansas State Historic Preservation Officer agreed with the recommendation of National Register eligibility. The Kansas City District of the Corps of Engineers, designated by the National Historic Preservation Act as the decision maker, determined that the property was eligible for listing on the National Register as a historic property, but not as a spiritually related traditional cultural property.

The Corps of Engineers, recognizing that this decision might be controversial, also requested the Keeper of the National Register to review all the information and make a final determination. The Keeper's office made a generally confirming determination in 2002, determining that the Haskell Agricultural Farm Property was eligible for the National Register because of its historic importance to the nation in areas of Education, Ethnic History-Native American, Politics/Government, and Social History. The Keeper agreed that there was no justification for considering the area a traditional cultural property.

The detailed review by the Keeper of the National Register made it clear that the Haskell Agricultural Farm Property should not be considered as a district in combination with the National Historic Landmark buildings on the central, main campus of the University. The Keeper stated that there was significant intervening modern construction and landscaping among the buildings and between this general campus area and the Farm Property. Definition of a large district was not appropriate.

The Keeper also set the boundaries of the property. The Haskell Agricultural Farm Property is located in the southern portion of the City of Lawrence, Douglas County, Kansas. It reaches from west and south of the HINU campus buildings on the property's north end, to the Wakarusa River on the south end, and lies between Louisiana Street and Haskell Avenue (see Exhibit 4f-5). The northern portion of the Farm Property (north of 31st Street) contains approximately 191 acres of open land, and is currently in BIA ownership. The southern portion of the property (south of 31st Street) contains approximately 613 acres. This includes BIA land between 31st Street and the north dike, the Baker Wetlands, and the smaller parcels owned by the University of Kansas and the Kansas Department of Wildlife and Parks.

c. Ownership

In the early 1950s, the Bureau of Indian Affairs (BIA) and Congress declared some lands at Haskell (and other Indian schools) to be surplus and eligible for donation to state and other organizations for public benefit. In 1957 and 1958, the BIA transferred several small tracts of the former Haskell farmlands to the City of Lawrence, Wakarusa Township, Douglas County, the Kansas Forestry, Fish, and Game Commission, and the University of Kansas. These lands were used to build schools, parks, and a fire station on the west side of the Haskell campus. The University of Kansas and the State of Kansas received small tracts within the bottom lands for biology research. Most of the bottom lands were transferred from the BIA to the Bureau of Sport Fisheries and Wildlife for management. Haskell retained about 320 acres, its main campus area and much of the original farm lands (north of the dike that is located just south of 31st Street – see Exhibit 4f-5).

In 1968, the Department of Health, Education and Welfare transferred the 573 acre tract previously given to the Bureau of Sport Fisheries and Wildlife to Baker University through a quit-claim deed which required use of the property for educational purposes. Baker University began a strong program to modify the abandoned farm lands. This included making breaks in the dikes, plowing the area, and planting prairie/wetland grasses. An important element of this program was placement of sod (containing grass roots) over the bottom lands; this sod had

been excavated during construction of a major drainage canal through the Wakarusa flood plain west of Haskell in 1970. By the summer of 1971, this sod had effectively re-established prairie grasses over the former agricultural fields. This area now became known as the Baker Wetlands. Baker University, by agreement, also manages the University of Kansas tract (about 20 acres) and the Kansas Department of Wildlife and Parks tract (about 20 acres), both of which are located in the northeast corner of the farm property, south of 31st Street (see Exhibit 4f-5).

d. The Existing South Haskell Campus

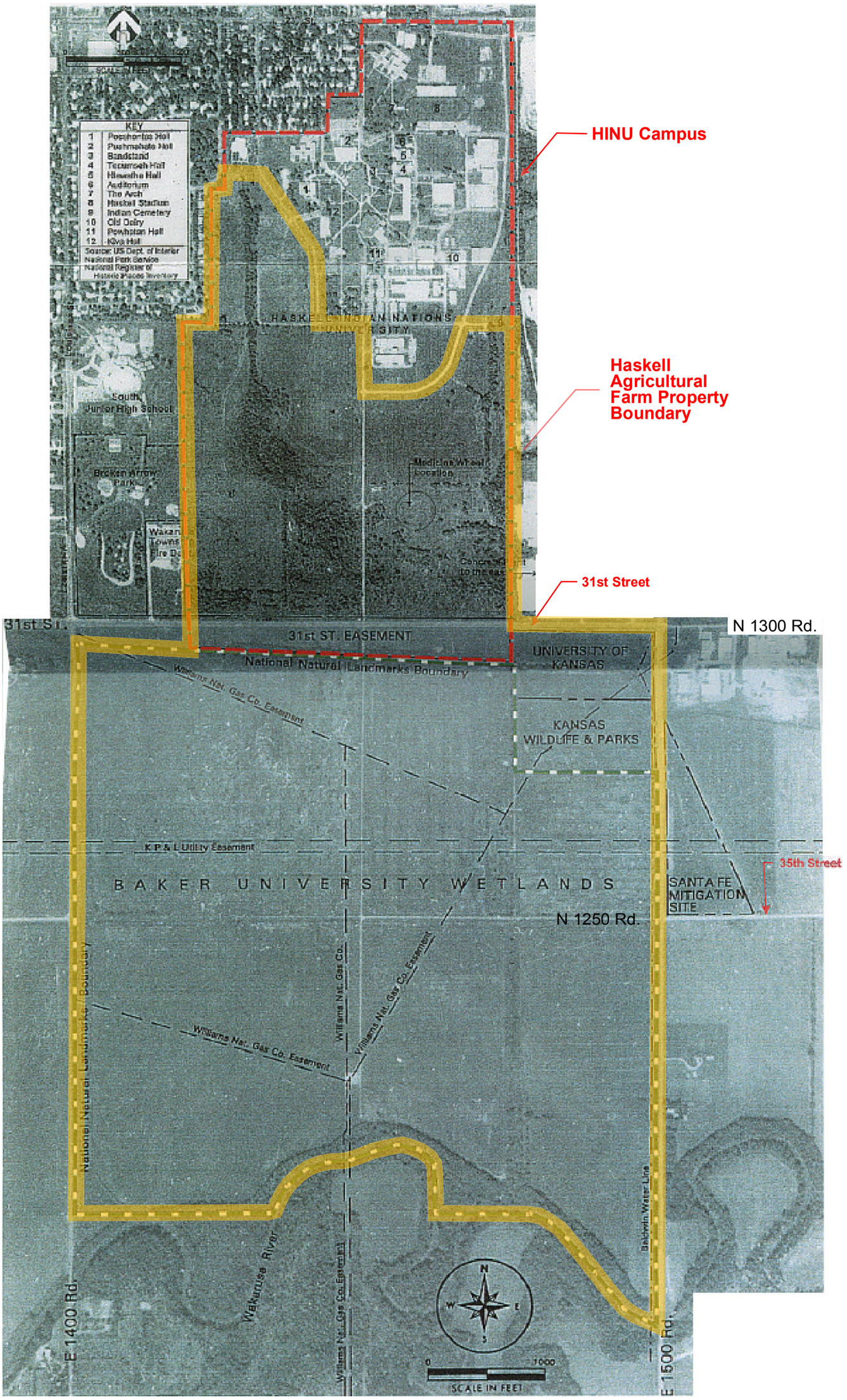
The southern half of today's HINU campus is an upland area gently sloping to the south toward the Wakarusa River flood plain. This landscape element was the upper part of the original Haskell farmlands. It extends to the southern boundary of today's campus just south of 31st Street (Exhibit 4f-5). Historically, this was open agricultural land used for crops, for grass/hay production, and for dairy herd pasture, and is thus included as the northern half of the Haskell Agricultural Farm Property. Today, this portion of the campus is a relatively natural landscape of grass mixed with deciduous trees. This area maintains its historical function as a separated, "open land" portion of the campus. It is used for various informal and formal activities by students. A large open area of grass often serves as an impromptu golf driving range. A Medicine Wheel and Sweat Lodges were built by students in areas screened by trees.

In this South Haskell Campus area, there are no known tribal or school designated areas dedicated historically to religious or spiritual activities (other than the modern Medicine Wheel and Sweat Lodge areas). The Medicine Wheel is a structural landscape element built in 1992 to provide a focus in gathering together tribal groups and the general community, and to provide a place to express the spiritual feelings of the Haskell community (Herd 1994; Greiser 1995). Sweat Lodges (small, relatively temporary and portable structures) were first constructed on the south Haskell campus in the middle or late 1960s, in the area west of the more recent Medicine Wheel (Greiser 1995). While the Medicine Wheel and Sweat Lodges are significant to the Haskell community, they are not historic due to their recent construction.

e. The Existing Baker Wetlands

The Baker Wetlands area encompasses about 573 acres of floodplain just south of the Haskell campus and extending south to the Wakarusa River (see Exhibit 4f-5). The main access to the Baker Wetlands area is from the middle north-south road off of 31st Street on the north side of the area, and from N 1250 Road off of Haskell Avenue on the east side of the area. Formerly crop lands of the Haskell Farm, the area is today dominated by prairie and wetland grasses and managed by Baker University for research and educational purposes. Figures 1 through 6 show the general appearance of the Baker Wetlands and the adjacent south campus area today. Historically, the Haskell Farm was open land, often closely cropped. Views today also show open land and wide vistas, although grass is high. A few trees are present today, primarily along remnant dikes and canals; although these trees do not appear in historic photographs. It should also be noted that there is little modern (structural) intrusion on the viewshed with, and of, the Baker Wetlands. There are two small, low profile equipment pods associated with underground pipelines through the area, but there are no buildings or other large structures within or immediately adjacent.

During the historic period, especially after 1919, drainage structures were built and maintained in the Haskell Farm lands. These included dikes, canals, and water control structures (dams with gates), and significant remnants of these historical features are still in place. Most prominent are the east-west and west side levees, and the north-south canal in the east half of the site. The types of wetlands include mostly emergent and scrub-shrub, with a few small forested wetlands. There are also open water canals/ditches and pools, and some shallow open water areas scattered throughout mostly the east half of the site.



HNTB

SOUTH LAWRENCE TRAFFICWAY K-10

EXHIBIT 4f-5
Baker wetlands in Relation to Haskell Campus

C. Alternatives

1. REASONABLE ALTERNATIVES

An initial screening (outlined in the Corps' Final EIS) yielded the following range of reasonable alternative corridors. These are alternatives that were considered technically and economically possible and at least minimally capable of addressing the purpose and need of the project (see Exhibit 4f-6).

- No-Action alternative[2]
- 31st Street
- 32nd Street corridor and its five alternative alignments
- 35th Street corridor and its two alternative alignments
- 38th Street corridor and its two alternative alignments
- 42nd Street corridor and its two alternative alignments

Screening of Alternative Corridors

The second screening resulted in the elimination of the following three alternative corridors: 31st Street corridor, 35th Street corridor, and 38th Street corridor, none of which would avoid or minimize impacts to the Haskell Agricultural Farm Property. Elimination of these corridors was based on the following factors:

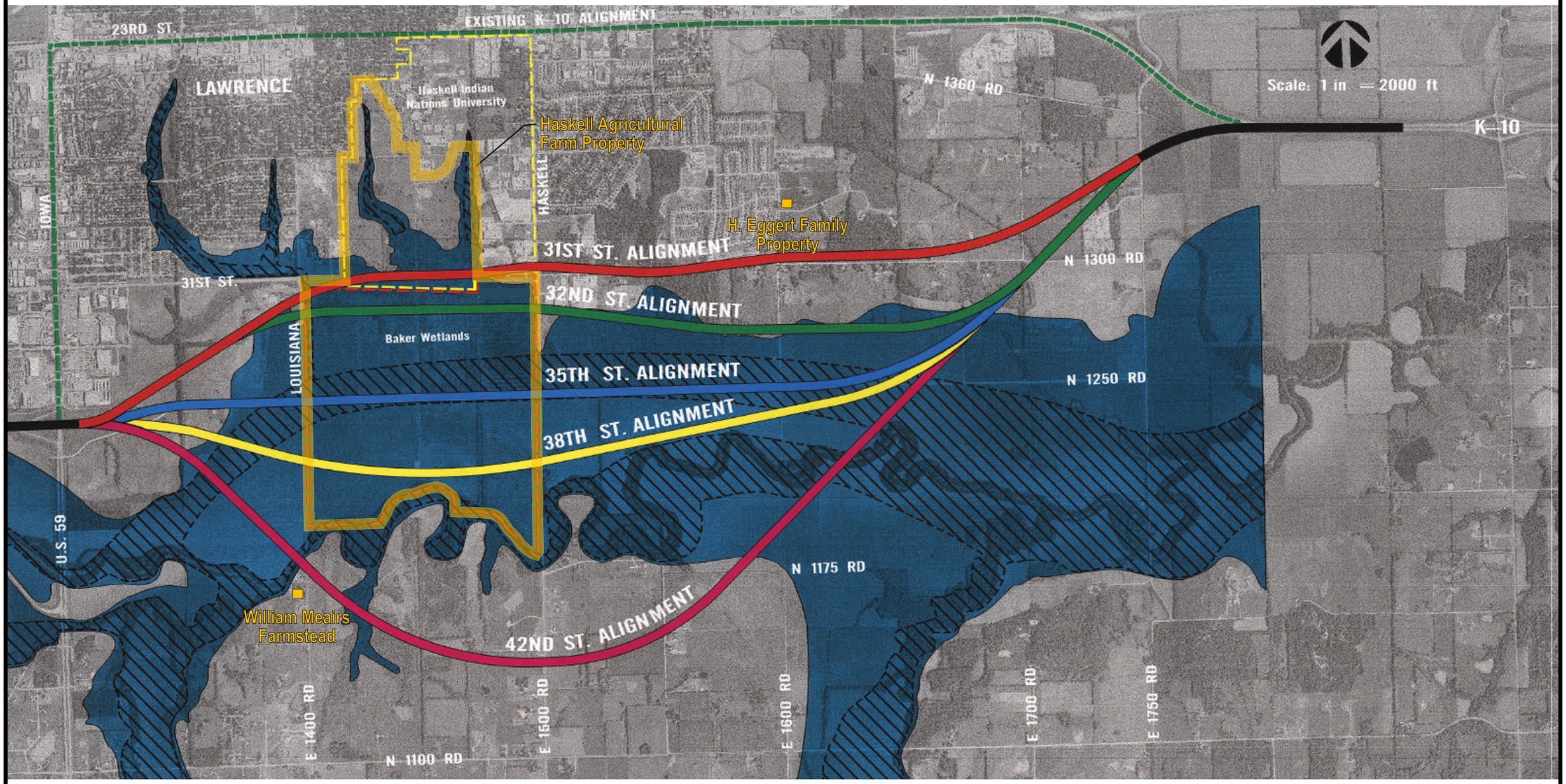
31st Street Corridor – From a purely economical, environmental, historic preservation, and operational points of view, the 31st Street corridor is the optimal location for the SLT. This alternative was long considered prior to the Corps' EIS, and advantages, as well as issues were thoroughly reviewed. Significant political and social obstacles exist which make construction of the SLT on Douglas County's easement through HINU property an unacceptable alternative. Accordingly, the 31st Street alternative was eliminated from further consideration since other operationally comparable alternatives are available that meet the project's purpose and need and do not directly impact HINU property.

The decision to eliminate the 31st Street alternative from further consideration was based on input received from the HINU Administration, its Board of Regents, Native American interest groups, the Bureau of Indian Affairs (BIA), and consultation with Native American tribes.

35th Street Corridor and Its Two Alignments – Although alignments within the 35th Street corridor could clearly achieve the purpose and need for the project, it was determined that the environmental impacts associated with alignments that bifurcate Baker Wetlands would have excessive adverse effects on the areas ecology and were, therefore, unacceptable given the availability of less damaging alternatives. In addition to dividing the wetland complex in half, alignments in the 35th Street corridor would create significant visual impacts that can be avoided, minimized or more readily mitigated in other corridors. Highway construction within the 35th Street corridor would also have the highest potential to impact the Wakarusa River floodway.

In summary, the alignments evaluated within the 35th Street corridor were determined to have an unacceptable potential to result in significant environmental impacts that can be avoided, minimized or more readily mitigated through selection of other less environmentally damaging alternatives with similar operational characteristics.

[2] As described, the No-Action alternative fails to satisfy the purpose and need of the project. However, NEPA requires the inclusion of this alternative in detail and to retain it as a basis of comparison for other alternatives.



LEGEND

- 100 Year Floodplain
- Floodway Area
- Existing K-10 Alignment
- Baker Wetlands
- Haskell University

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-6
Alternatives

12/05/02 Revised 08/21/06

38th Street Corridor and Its Two Alignments – The 38th Street corridor was eliminated from further consideration since construction within the corridor would create a barrier between the Wakarusa River and the majority of the Baker Wetlands complex that would be cut off and isolated on the north side of the highway. Creating a physical barrier between the Wakarusa River and Baker Wetlands will have a high potential to significantly impact the area's ecology and is expected to substantially impact terrestrial wildlife species that travel between the Wakarusa River's riparian corridor and the Baker Wetlands complex.

An additional concern related to selection of an alignment within the 38th Street corridor was the potential to disturb unmarked Native American burials that may be present in the vicinity of the Wakarusa River. This concern was based on information included in a separate report titled *Documentation and Recommendations Concerning Determination of Eligibility for the National Register of Historic Places of Haskell Indian Nations University and the Baker Wetlands, Douglas County, Kansas,* dated December 2001, and prepared by Brockington and Associates, Inc. An excerpt from the report stated the following: "*One credible (and confidential) informant did relate that he/she had personally seen at least one burial and was aware of one or two others. These were in a location near the Haskell Dump (adjacent to the Wakarusa River) or nearby in an unfarmed area within a river meander loop, in a grove of trees. This knowledgeable individual also stated that she/he did not have information indicating widespread, numerous burials".* During the preparation of the Corps EIS, extensive investigations were conducted to resolve this issue. Contacts included the Department of the Interior – Bureau of Indian Affairs, Baker University, Kansas University – Department of Anthropology, the Kansas Unmarked Burials Preservation Board and others who may have information on this matter. In addition, available literature sources were examined (newspaper accounts, sheriff and coroner reports, funeral home records) and several professional surveys were conducted on the property for the purpose of determining if such burials are likely to be present. It was concluded that the likelihood of disturbing human burials in the wetlands along an alignment of the trafficway was extremely low.

The alignments evaluated within the 38th Street corridor were not considered further since less environmentally damaging alternatives with similar operational characteristics were available for selection.

2. FINAL ALTERNATIVES IN THE CORPS' EIS PROCESS

After the Corps' second screening, the 32nd Street corridor with its five alignments (A, B, C, D & E) and the 42nd Street corridor with its two alignments (A & B) remained for further evaluation. These two remaining corridors have distinctly different characteristics and impacts. Each corridor has benefits as well as disadvantages that were considered. In order to further refine the remaining alternatives, and to provide a clear basis for decisions regarding preferred alternatives in the subsequent screening, the seven remaining alternative alignments were narrowed down to two, with one in each corridor. This required a screening within each corridor.

a. Screening of Final Alternative Alignments

All of the 32nd Street alternative alignments would have similar impacts to the Haskell Agricultural Farm Property.

32nd Street Alignments

Screening among the 32nd Street alternative alignments (A, B, C, D & E) was focused on preserving the greatest benefits while minimizing adverse impacts as much as is practical. A

majority of the assessment factors such as cost, traffic projections, as well as system performance measures such as VMT (vehicle miles of travel) and VHT (vehicle hours of travel), offered little assistance in distinguishing between the 32nd Street alignments. However, the following assessment factors did assist in identifying the 32nd Street alignment that would best serve the overall public interest in this matter:

- Number of residential and business displacements.
- Farm ownership severances and impacts to farmland soils.
- Consistency with existing and planned land use, transportation planning, and secondary impacts.

Alignments C and D were eliminated primarily because they resulted in a higher number of farmland impacts, farm ownership severances, and residential and business displacements. They also scored poorly for consistency with current and planned land use, and transportation planning.

Although alignment E had the fewest number of residential and business displacements, it was eliminated because it had poorer ratings in regard to farmland impacts, farm ownership severances, and consistency with current and planned land use than did alignments A and B. Alignment E was also lacking in access points at either Louisiana Street or Haskell Avenue, and did not have the benefit of facilitating removal of 31st Street.

Although alignment A was viewed favorably based on the assessment factors, it was eliminated because it did not include the removal of 31st Street from HINU property.

This detailed and thorough review of impacts and benefits lead to the identification of the **32nd Street Alignment B Alternative** as a preferred alternative in the Corps' Draft EIS. After a review of all reasonable alternatives consideration of all comments received on the Draft EIS, and a detailed comparison of the two Preferred Alternatives presented in the Corps' Draft EIS (32nd Street Alignment B and 42nd Street Alignment A), the **32nd Street Alignment B Alternative** was determined to be the Selected Alternative in the Corps' Final EIS. The final evaluation considered all available information related to the project, including information developed by the Corps and KDOT, and agency and public comments received during and after the close of the comment period, but prior to the final decision regarding the selection of an alternative.

Based on its findings, the Corps determined that the 32nd Street Alignment B Alternative is the alternative that best serves the overall public interest in this matter, and is the least environmentally damaging practicable alternative available to KDOT to meet the project's purpose and need. The Corps' determination was based, in part, on consideration of future foreseeable cumulative impacts associated with the two final alternatives, and on consideration of avoidance, minimization and beneficial mitigation measures.

Although other issues were raised during the review period, the most substantial public opposition was to any bypass alignment that would be routed through Baker Wetlands. The majority of the comments and concerns were related to two issues: 1) significant adverse impacts to the areas ecology and 2) concerns about Native American religious/spiritual interests in this area.

Some tribes, HINU students and other interested parties have stated that Baker Wetlands contains/may contain unmarked burials of former Haskell Institute students. During the preparation of the Corps EIS, research and extensive investigations were conducted to resolve this issue as indicated in the text for the 38th Street corridor, in section C.1. of this document. In

addition, the Kansas State Historical Society also conducted a pedestrian and shovel testing survey of the 32nd Street alignment. The SHPO, in a letter dated April 22, 2002 (see Appendix D), stated that the pedestrian and shovel testing survey of the 32nd Street alignment did not locate any cultural materials or evidence of human burials, and that the SHPO concurred with the survey report's recommendation that no additional archaeological investigations were necessary for the 32nd Street alignment. Based on all available information, it was concluded that the 32nd Street Alignment B Alternative has a very low probability to disturb unmarked burials in Baker Wetlands.

Based on the above information, the FHWA intends to carry the 32nd Street Alignment B Alternative forward as one of the alternatives in this Section 4(f) Evaluation.

42nd Street Alignments

Although the two 42nd Street alignments (A and B) were similar in many ways, the following differences were identified and considered:

- Alignment B resulted in approximately four times the number of residential displacements as Alignment A.
- Alignment A resulted in fewer infringements on wetlands, floodways and floodplains.
- Alignment B would cost more to construct and operate.
- Alignment B would lack system continuity and would not meet driver expectations.

For these reasons, the **42nd Street Alignment A Alternative** was selected as the most desirable 42nd Street alternative, and was identified as a preferred alternative in the Corps' Draft EIS.

Based on the above information, the FHWA intends to carry the 42nd Street Alignment A Alternative forward as one of the alternatives in this Section 4(f) Evaluation.

b. Final Alternatives Description

The following text is a brief summary of the Feasible final alternative alignments, including a description and text regarding overall environmental impacts. Specific impacts on the Section 4(f) properties are discussed in Section D of this document.

No-Action Alternative

The two primary local planning documents referred to in the Corps' EIS were *Transportation 2025* and *Horizon 2020*. These documents represent the collective work of the city and county planning bodies and were a guide for the Corps in determining the compatibility of various alternatives with local planning desires and decisions. *Transportation 2025*, the city and county transportation plan, identifies completion of the SLT as a high priority, which "will provide both local and regional service and relieve congestion on 23rd Street." *Horizon 2020,* which focused primarily on land use, identifies the need for a circumferential road system that facilitates the city's land use plan. The No-Action Alternative does not contribute to the accomplishment of these local transportation planning needs.

The No-Action Alternative assumes that KDOT would not construct the proposed facility between existing US-59 Highway and K-10 Highway during the planning period. Kansas Highway 10 traffic would continue to be routed through Lawrence on US-59 Highway and 23rd Street, as shown on Exhibit 4f-7.

32nd Street Alignment B Alternative

Alignment – Beginning at the western terminus at US-59 Highway, the alignment extends northeast to a point just south of the Louisiana and 31st Street intersection. At Louisiana Street the alignment turns in a more easterly direction generally paralleling 31st Street. The alignment extends between Louisiana Street and Haskell Avenue approximately 600 to 800 feet south of 31st Street. East of Haskell Avenue the alignment passes along the south side of an industrial park southeast of the Haskell Avenue and 31st Street intersection. At E 1700 Road the alignment turns northward following a northeasterly projection to an interchange with K-10 Highway east of E 1750 Road. The alignment is located just south of HINU's southern boundary between Louisiana Street and Haskell Avenue. This location confines impacts to the northern edge of Baker Wetlands, and thus avoids bisection of the Baker Wetlands. The alignment's location between Haskell Avenue and E 1700 Road is routed south of a creek to minimize impacts to the stream and any adjacent wetlands. (See Exhibit 4f-8.)

Access Points – The 32nd Street Alignment B Alternative has access points at the western and eastern termini of the project. These interchanges are system interchanges providing access to the state highway system along with access to local roads. The interchange on the western terminus is the completion of a diamond interchange at US-59 Highway. The interchange at the eastern terminus is a fully directional interchange providing all the movements between the SLT and the existing K-10 Highway/23rd Street. There is one local access point between the two 32nd Street termini interchanges and local roadways. It is a folded diamond interchange providing access to a relocated Haskell Avenue.

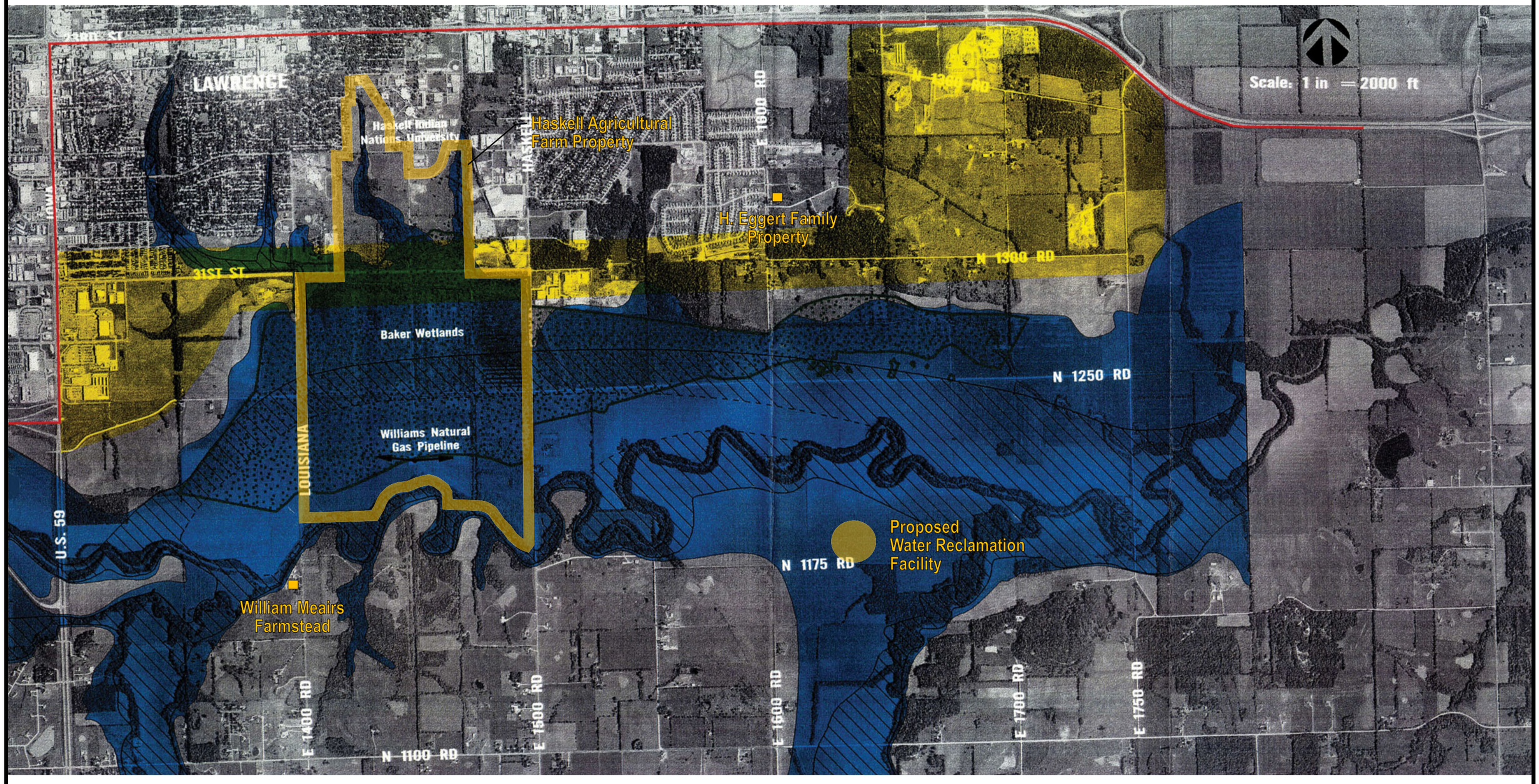
Local Roadways – With this alignment, local roadway modifications are planned for E 1750 Road, Haskell Avenue, Louisiana Street, and 31st Street. As a result of the directional interchange on the eastern terminus of the SLT, access to 1750 Road from K-10 Highway must be modified. The at-grade intersection must be eliminated and access from K-10 Highway to 1750 Road provided by a new frontage road connecting to East Hills Drive. The new frontage road will intersect with 1750 Road at the existing County Route 442 intersection. The frontage road will parallel K-10 Highway/23rd Street to the west connecting with East Hills Drive at a location with appropriate spacing between the K-10 Highway/23rd Street and Greenway Drive intersections. This alignment alternative relocates Haskell Avenue approximately 1,000 feet east of its existing alignment between 31st and 35th Streets on a new alignment at N 1250 Road. This alternative also relocates Louisiana Street to the west between the proposed 32nd Street route and the Wakarusa River, and relocates 31st Street to the south between Louisiana Street and Haskell Avenue.

Cost Estimate – Planning level cost estimates were developed for the 32nd Street Alignment B Alternative using KDOT typical unit costs. The project costs for the fully built-out four-lane freeway were estimated to be $147.9 million in 2007 dollars[3].

42nd Street Alignment A Alternative

Alignment – From the western terminus at US-59 Highway the alignment extends eastward then turns in a southeasterly direction crossing the north branch of the Wakarusa River floodway and the Wakarusa River. West of Louisiana Street the alignment turns due east and parallels N 1100 Road approximately 1,970 feet north of the existing road. At E 1600 Road the alignment turns northeast and extends to its eastern terminus at K-10 Highway. A bridge 4,265 feet long crosses the Wakarusa River and its floodway. (See Exhibit 4f-9.)

[3] Costs have been revised based on a review of original cost items and assumptions from the Corps' Final EIS.



LEGEND

- 100 Year Floodplain
- Floodway Area
- Hydric Soil
- Possible 31st Street Corridor*
- No-Action Alignment

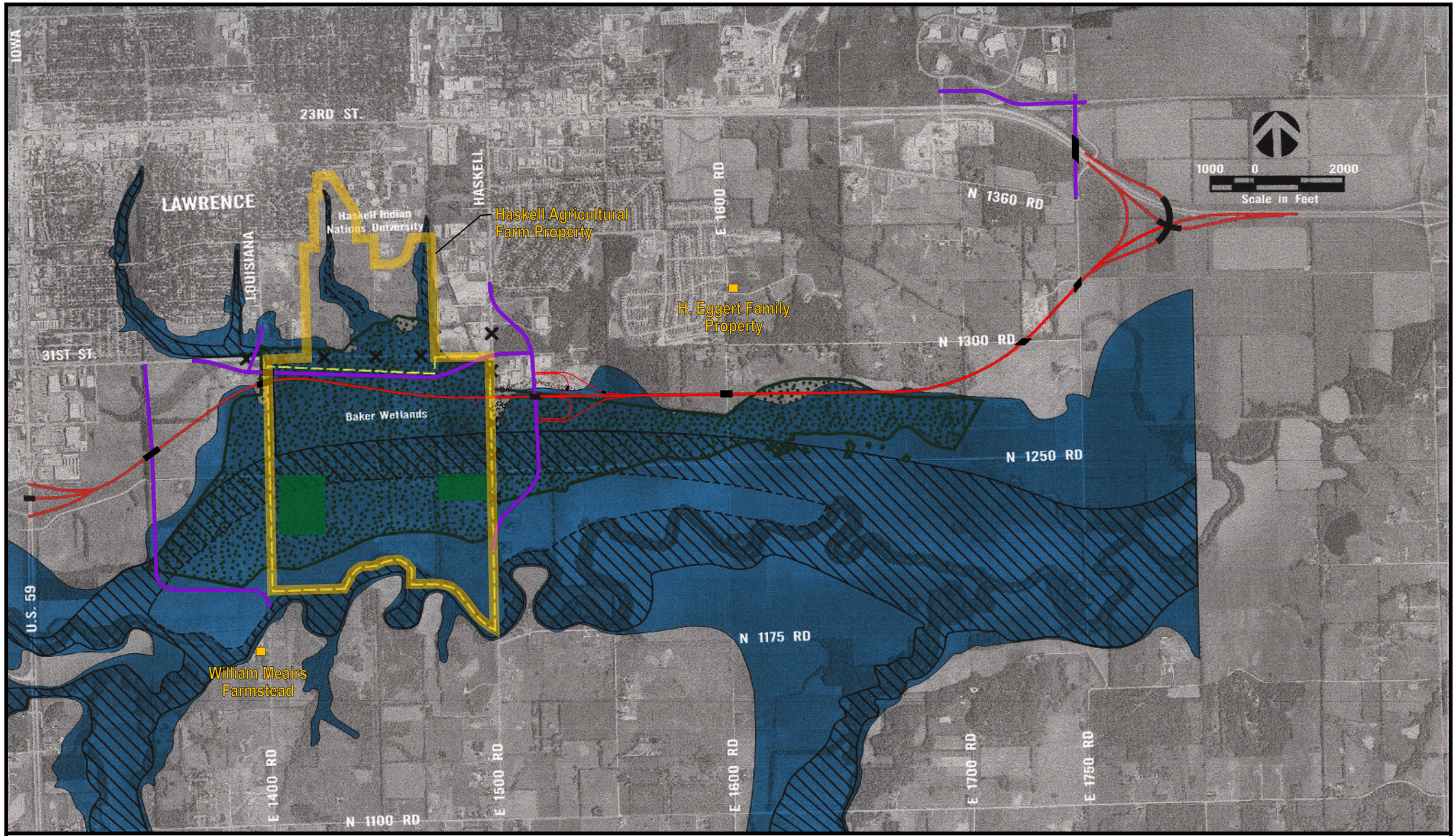
NOTE: Along with the existing K-10 designation (23rd Street and Iowa Street), this exhibit illustrates the general corridor in which the City of lawrence and Douglas County are studying improvements to 31st Street.*

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-7
No-Action Alignment

08/17/01 Revised 08/21/06



LEGEND

- Floodplain
- Floodway
- Hydric Soils
- Virgin Prairie Wetlands
- Anticipated Bridge Locations (others may be required for drainage)
- Baker Wetlands
- 32nd Street Alignment B
- Local Street Improvements

NOTES

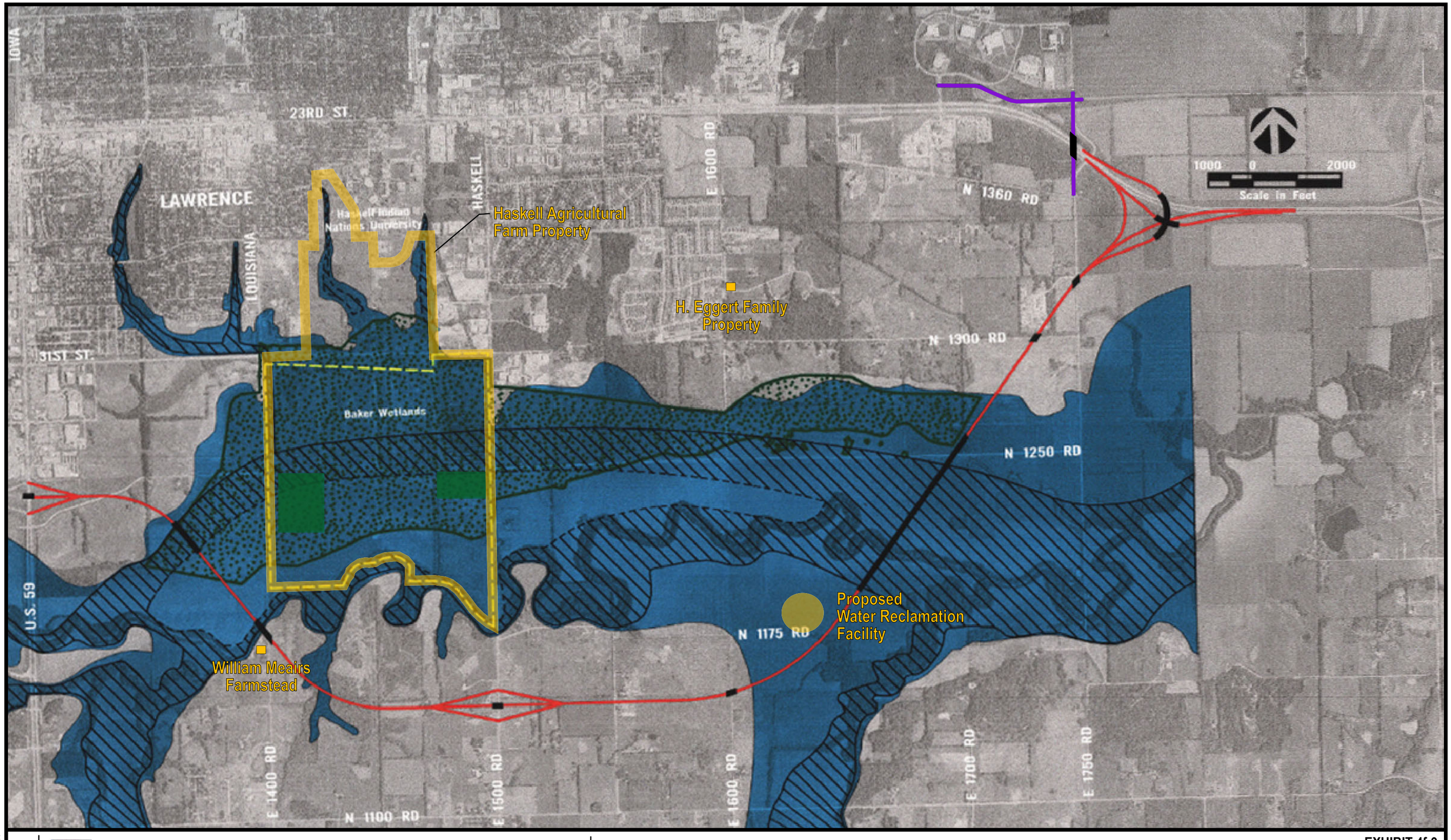
1. Preliminary Alignment Concepts are shown. Alignment locations are schematic and may shift. Variations or combinations of these preliminary alignments may be included in further study reviews.
2. Ultimate design to be a freeway similar to K-10 east of Lawrence (4-lane divided highway with interchanges). Initial construction may include two lanes of paving and at-grade intersections (similar to K-10 west of US 59).

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-8
32nd Street Alignment B

12/05/02 Revised 08/22/06



LEGEND

- Floodplain
- Floodway
- Hydric Soils
- Virgin Prairie Wetlands
- Anticipated Bridge Locations (others may be required for drainage)
- Baker Wetlands
- 42nd Street Alignment A
- Local Street Improvements

NOTES

1. Preliminary Alignment Concepts are shown. Alignment locations are schematic and may shift. Variations or combinations of these preliminary alignments may be included in further study reviews.
2. Ultimate design to be a freeway similar to K-10 east of Lawrence (4-lane divided highway with interchanges). Initial construction may include two lanes of paving and at-grade intersections (similar to K-10 west of US 59).

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-9
42nd Street Alignment A

12/05/02 Revised 08/22/06

Access Points – The 42nd Street Alignment A Alternative has access points at the western and eastern termini of the project and at Haskell Avenue. The termini interchanges are system interchanges providing access to the state highway system along with local access. The interchange at the eastern terminus is fully directional providing all the movements between the SLT and K-10 Highway/23rd Street. The interchange with Haskell Avenue is a typical diamond interchange. The interchange on the western terminus at US-59 Highway is a completion of the diamond interchange.

Local Roadways – The 42nd Street Alignment A Alternative requires some local roadway modifications as a result of the system interchange on the eastern termini. As a result of the directional interchange on the eastern terminus of the road, access to E 1750 Road from K-10 Highway/23rd Street must be modified in the same manner as that described for the 32nd Street Alignment B Alternative.

Cost Estimate – Planning level cost estimates were developed for the 42nd Street Alignment A Alternative using KDOT typical unit costs. The estimated project cost for this alignment is $166.9[4] million in 2007 dollars.

[4] Costs have been revised based on a review of original cost items and assumptions from the Corps' Final EIS.

D. 32nd Street Alignment B Alternative Impacts on the Section 4(f) Properties and Environment

1. DIRECT IMPACTS TO 4(f) PROPERTIES

The 32nd Street Alignment B Alternative passes through the Haskell Agricultural Farm Property and will have a direct adverse impact on the Farm Property (see Exhibit 4f-8).

The Farm Property is large (804 acres) and is composed of an array of diverse elements. The general area where the 32nd Street Alignment B Alternative would cross the property is a mixture of historic structures (e.g., dikes, canals, roads, bridges and water control gates), and open landscape – all part of the former Haskell Institute's agricultural training land.

Physical impacts associated with this alignment would involve construction of approximately one mile of 300- to 400-foot-wide roadway corridor across the Farm Property on approximately 53 acres of land east-west across the property. This includes all construction, the South Lawrence Trafficway, relocation of 31st Street, mitigative walls and vegetation, and construction of a hike and bike trail) east-west across the property. The roadway corridor would be constructed south of the east-west dike and canal located along the northern edge of Baker Wetlands to avoid and preserve these significant structures.

Fill associated with construction of the 32nd Street Alignment B Alternative will be placed on approximately 48 acres of the former Haskell Institute's farm fields (now wetlands). An additional five (5) acres within the Farm Property would be filled with earthen material and a bridge structure to cross remnant structures: a degraded and intermittent remnant dike along the eastern edge of the property (placement of earthen fill); Mink Creek a north-south drainage canal located on the eastern half of the property (placement of earthen fill); the north-south access road and the adjacent borrow area (ponded water) located in the center of the property (placement of earthen fill); and the dike and Naismith Creek drainage canal located along the western edge of the property (construction of a bridge and associated earthen fill).

Construction of the 32nd Street Alignment B Alternative will alter small portions of the surface of the Farm Property by placing fill material in W-ditches, fields, the Mink Creek drainage canal, the north-south access road, the low eastern and western remnant dikes. The borrow area (ponded water) located immediately east of the north-south access road is a recent feature created by Baker University when borrow material was excavated to raise the access road. The dike located along the western edge of the property has already been modified over its entire length when it was relocated approximately 25 to 30 feet east of its historic location in 1969 in an effort to reduce flooding north of 31st Street.

2. CUMULATIVE AND INDIRECT IMPACTS TO 4(f) PROPERTIES

The elevation of the roadway corridor and its associated structures within the segment of the bypass passing through the Farm Property have been designed to avoid significant impacts to views within the Property. Changes to the current views will be most dramatic close to the roadway, with diminishing viewshed impacts as one moves farther north or south of the road.

The historic open views of the Farm Property have already been modified by second growth trees on the southern half of the HINU campus and a line of trees along the east-west dike at the northern edge of Baker Wetlands. These existing trees form a break or barrier to the probable open views from the north of the historic landscape. The roadway corridor will be located parallel to and immediately south of the tree line on the northern edge of Baker Wetlands and, therefore, will be generally screened from the HINU campus. Open views from the east, west, and south will be preserved.

A traffic noise analysis was completed for the proposed SLT alternatives. The noise analysis was performed in accordance with FHWA and KDOT policies using the Traffic Noise Model. Existing noise levels were measured in the field. Noise measurements were taken during September 2001 at 13 locations identified as noise sensitive areas or as areas having a potential to be impacted by the proposed project. Measurements were taken on warm, dry, and calm weekdays using a Quest 2900 integrating/logging level meter.

Acceptable noise levels have been established for various activities related to land use. Category A lands are those where serenity and quiet are of extraordinary significance and serve an important public need. Category B land use includes picnic areas, park and recreational areas, residences, motels, hotels, schools, churches, libraries and hospitals. Category C land is developed land that is not included in Categories A or B. Category D land is any undeveloped area.

An exterior noise level of 57 dBA (A-weighted decibels) or less is acceptable for Category A land. An exterior noise level of 67 dBA or less is acceptable for Category B land, and a noise level of 72 dBA or less is considered acceptable for Category C land. There are no dBA guidelines for Category D land. Existing noise levels in the project area range from 51.1 dBA to 64.1 dBA, and the majority of the land use is Category B or C.

3. OTHER ENVIRONMENTAL IMPACTS

a. Relocations and Farm Severances

The 32nd Street Alignment B Alternative has four residential relocations, four business relocations, and 11 farm severances.

b. Floodplain and Floodway Impacts

The 32nd Street Alignment B Alternative is routed along the northern edge of the Wakarusa River floodplain for a distance of approximately three miles (approximately two miles of the alignment are located in the floodplain), however the main alignment does not cross the Wakarusa River floodway. Existing Louisiana Street and Haskell Avenue are currently located in the floodway and floodplain. The relocation of Louisiana Street will result in a slight reduction in the length of the road within the Wakarusa River floodplain and floodway. However, the length of relocated Haskell Avenue within the floodplain and floodway will be approximately the same as existing conditions.

c. Wetland Impacts

The 32nd Street Alignment B Alternative passes through the Baker Wetlands, resulting in impacts to wetlands totaling 53 acres. In addition, this alternative would impact wetlands outside of the Baker Wetlands, and open water in ponds and lakes. To mitigate for the total wetland losses of 58 acres, a total of approximately 317 acres of wetlands will be created for a net gain of approximately 259 acres of wetlands.

d. Stream Impacts

The 32nd Street Alignment B Alternative will include 6 stream crossings, equating to 2800 linear feet of stream impacts.

e. Woodland Impacts

The 32nd Street Alignment B Alternative will impact 1.2 acres of riparian woodlands and 9.6 acres of upland woods.

f. Noise Impacts

The 32nd Street Alignment B Alternative was modeled for noise levels with and without noise walls. Without noise walls, there would be a greater impact on adjacent noise-sensitive areas (HINU south campus, Baker Wetlands). However, due to noise mitigation features, which include 12-foot-high noise walls and relocation of Louisiana Street and Haskell Avenue, the total audible disturbance associated with this alternative will be less by the year 2025 (ending year for local land use planning) than noise disturbances associated with the No-Action or 42nd Street alternatives.

g. Visual Impacts

The 32nd Street Alignment B Alternative, with mitigation, will have a low visual impact on HINU's southern campus. Trees and the dike located along the northern edge of Baker Wetlands will substantially screen the roadway from users in the south campus area. The removal and relocation of 31st Street will significantly reduce the roads visual impact on the campus. This Alternative, with mitigation, will have a low visual impact on the Baker Wetlands, as noise walls and vegetative plantings will screen views of the road from users in Baker Wetlands.

h. Consistency with Future Land Use

The 32nd Street corridor is within the Lawrence Urban Growth Area, Service Area 4. Development south of 31st Street outside of the floodplain is planned for low-density residential use, with some mixed and industrial use along the eastern leg of the SLT. *Horizon 2020* policies/recommendations prohibit urban development within this area until access to a municipal wastewater treatment system is either planned or under development. A wastewater treatment facility is currently in the planning stages. In addition, land located within the 100-year floodplain is not recommended for urban development.

Because of the built-out character of the area north of 31st Street and the limited potential for development in some areas (Baker Wetlands and the floodplain) along its southern side, the 32nd Street Alignment B Alternative will have a somewhat limited impact on future development. The greatest potential for development pressure will occur at the interchanges between the SLT and local arterial streets. Such pressure may include requests for approval of commercial development along Haskell Avenue and replacement of the existing industrial site at the intersection of Haskell Avenue and 31st Street. This will also be likely to increase the demand for commercial development south along US-59 Highway.

The 32nd Street Alignment B Alternative is generally consistent with the goals set forth in *Transportation 2025*, the preliminary *Transportation 2030* study, amended *Horizon 2020*, and the *South Lawrence Trafficway Corridor Land Use Plan*. The *South Lawrence Trafficway Corridor Land Use Plan* should remain generally applicable with respect to general policies and recommendations, although specific land uses, zoning classifications and references to existing plans may need to be updated.

E. Avoidance Alternatives

As discussed previously, the project's Area of Potential Effect includes the following Section 4(f) historic properties:

- Haskell Agricultural Farm Property
- William Meairs Farmstead

The avoidance alternatives include the No-Action Alternative and the 42nd Street Alignment A Alternative, both of which would avoid direct impacts to historic properties within the Area of Potential Effect. However, the No-Action Alternative does not address the future growth of the area, and does not meet the purpose and need. The No-Action Alternative and the 42nd Street Alignment A Alternative may also have an indirect impact by increasing traffic on roads adjacent to the Farm Property, and by failing to prevent urban development from occurring adjacent to the Farm Property.

1. NO-ACTION ALTERNATIVE

The No-Action Alternative will have no direct impacts to the Section 4(f) historic properties identified within the project's Area of Potential Effect. However, the No-Action Alternative with a comprehensive regional public transit system has been considered and disregarded as not meeting the purpose and need for the project. A reasonable estimate of transit mode share would not reduce traffic demand enough to significantly reduce traffic congestion. The No-Action Alternative assumes that K-10 Highway will not be relocated and that the connecting link through the city of Lawrence will remain essentially unchanged for the near future. This alternative will result in worsening traffic conditions on K-10 Highway and will continue to degrade the human environment due to increasing traffic congestion, high accident rates, noise, lost time, and other traffic-related deficiencies.

The No-Action Alternative may accelerate the city of Lawrence and Douglas County's need to provide an improved major arterial connection along or in the vicinity of the existing 31st Street alignment. It should be noted that the city and county are currently studying possible improvements in the 31st Street corridor.

The No-Action Alternative does not satisfy Lawrence and Douglas County's local planning objectives, which include improvements to both local and regional transportation service and relief for congestion on 23rd Street. The No-Action Alternative will encourage Lawrence and Douglas County to widen 31st Street between Haskell Avenue and Louisiana Street to accommodate an increasing volume of local traffic on 31st Street due to congestion and delays on the K-10 Highway connecting link. Increased traffic volumes on 31st Street will increase noise and visual disturbances on the Haskell Indian Nations University (HINU) campus and in the Baker Wetlands. In addition, the No-Action alternative may have an indirect impact on the Farm Property due to the fact that growth will occur west of Louisiana Street and east of Haskell Street adjacent to the Farm Property. Also, growth south of the river will require the widening of Louisiana, Haskell, and 31st Streets.

2. 42ND STREET ALIGNMENT A ALTERNATIVE IMPACTS

a. Direct Impacts to 4(f) Properties

The 42nd Street Alignment A Alternative (see Exhibit 4f-9) does require right of way from the William Meairs Farmstead Property, however, the FHWA has determined, with concurrence of the SHPO (see letter dated March 13, 2007 in Appendix D), that this action will have a no adverse effect with vegetative screening mitigation. If this alternative were to be selected, FHWA would use this finding as a basis to make a Section 4(f) 'de minimis' use finding for this

Section 4(f) resource. This alternative does avoid a direct impact to the Haskell Agricultural Farm Property and is considered an avoidance alternative.

b. Cumulative and Indirect Adverse Impacts to 4(f) Properties

Although the 42nd Street Alignment A Alternative would have no direct impacts to the Haskell Agricultural Farm Property, it would result in greater long-term cumulative adverse impacts to the Haskell Agricultural Farm Property than an alignment traveling through the Haskell Agricultural Farm Property. These long-term adverse social and environmental impacts would result from increases in traffic along roads adjacent to the HAFP (Louisiana, Haskell and 31st Street), reasonably foreseeable development immediately adjacent to the Haskell Agricultural Farm Property, and the uncertain future financial stability of a portion of the HAFP (Baker Wetlands) if the 32nd Street Alignment B Alternative is not selected.

Growth of Traffic on Adjacent Roads to Haskell Agricultural Farm Property

Urban development in the vicinity of the Haskell Agricultural Farm Property, including areas south of the Wakarusa River, will generate significant increases in local traffic (traffic analysis was based on a time-frame from 1998 through 2025). Development in the vicinity of the Haskell Agricultural Farm Property on the north side of the Wakarusa River will be served for east/west traffic by 31st Street. Development in the vicinity of the Haskell Agricultural Farm Property on the south side of the Wakarusa River will be served for north/south traffic by both Haskell Avenue and Louisiana Street. Development in these areas will result in significant increases in local traffic and will very likely lead to expansion of 31st Street and Haskell Avenue and/or Louisiana Street from two-lane roads to four-lane roads to accommodate the growth. Currently, 31st Street is planned to be extended east, from Haskell Avenue to O'Connell Road (E 1600 Road).

The 42nd Street Alignment A Alternative is expected to accelerate development south of the Wakarusa River since development is expected to follow the new roadway into this rural setting. Development south of the river will substantially increase traffic on both Haskell Avenue and Louisiana Street since both roads are bridged over the Wakarusa River and provide primary north/south routes into Lawrence. The 42nd Street Alignment A Alternative will not provide any protection from future development and its associated traffic in the vicinity of the Haskell Agricultural Farm Property.

Development of Land Adjacent to Haskell Agricultural Farm Property

Local planning objectives are set forth in *Transportation 2025* and *Horizon 2020*, the area's long-term land use plans. The existing land uses along the 42nd Street Alignment A Alternative corridor are agricultural, very low-density residential, and open space. North 1000 Road is the primary existing east/west road in this area and is located to the south of the 42nd Street corridor.

This area is designated by *Horizon 2020* as a Service Area 4 of the Lawrence Urban Growth Area (UGA). Policies and recommendations related to Service Area 4 south of the Kansas River include the following:

- Reasonable street access shall be provided to the area. Arterial and collector roads should be extended across the Wakarusa River to serve the area to the south.
- Land that has been designated as either Floodway or 100-Year Floodway Fringe is not recommended for urban development unless the development complies with the city floodplain regulations. Floodplain areas are appropriate for agricultural uses and for green space recreational uses such as bike/walking paths and parks.

The 42nd Street Alignment A alternative would greatly increase the accessibility of this area, and it is anticipated that this alternative would add greater pressure for development for both residential and commercial uses. As indicated by the future land use map and designation of growth/service areas, Lawrence anticipates that its growth areas will be to the south and the west. *Horizon 2020* identifies a phasing plan for this growth through its Growth Management goals and policies. Placing the SLT along the 42nd Street Alignment A Alternative will create infrastructure demand south of the Wakarusa River. This is true, even though the SLT is not a local street, because the SLT will include interchanges that will enhance access. In addition, amendments have been made to the *Horizon 2020 Plan*, and the *Transportation 2025 Plan* is being revised and updated for 2030. The amended *Horizon 2020 Plan*, the *Transportation 2025 Plan*, and the preliminary *Transportation 2030* study all include the 32nd Street Alignment B Alternative and addition of the area south of the Wakarusa River in the UGA. In the preliminary *Transportation 2030* study, there have been some minor changes to the future land use plan in the area south of the river, however, most of it is still designated as low density residential.

In addition, the *Horizon 2020* plan identifies low and high-density residential growth west of Louisiana Street. The entire area between US-59 Highway and Haskell Avenue is shown as an Urban Growth area. Based on this information, a review of development trends, and discussions with local planning authorities (during the preparation of the EIS), it was determined that urban development will occur within the foreseeable future on undeveloped land located in the vicinity of the Haskell Agricultural Farm Property. A portion of the land located immediately west of the Haskell Agricultural Farm Property is platted for multi-family development and is currently owned by KDOT. The land was purchased by KDOT after it had been platted and was planned to be utilized for right-of-way and mitigation associated with construction of an alternative that is aligned through the Haskell Agricultural Farm Property. This land will most likely be returned to private ownership and will be subject to urban development if the 42nd Street Alignment A Alternative is selected.

Under the 42nd Street Alignment A Alternative, the Haskell Agricultural Farm Property will be left unprotected from adjacent development. Although such development would not be expected to encroach into the Haskell Agricultural Farm Property, it would be expected to impact developable areas east, west and south of the Haskell Agricultural Farm Property. Such development would diminish or eliminate the rural character of the land in the vicinity of the Haskell Agricultural Farm Property. Urban development in the vicinity of the Haskell Agricultural Farm Property, along with associated increases in traffic on Haskell Avenue and Louisiana Street, will lead to significant increases in noise, light, urban debris, and visual disturbances in and around the Haskell Agricultural Farm Property.

The Corps concluded that selection of the 42nd Street Alignment A Alternative will result in greater long-term cumulative adverse impacts to Baker Wetlands than the 32nd Street Alignment B Alternative with mitigation. The 32nd Street Alignment B Alternative insulates the core of the existing Baker Wetlands complex from adjacent development through creation of a 304-acre wetland mitigation buffer on the agricultural land located immediately east and west of the property, thereby preserving its rural character.

Long-Term Financial Stability of the Baker Wetlands

The Baker Wetlands within the Haskell Agricultural Farm Property is owned and managed by Baker University. Dr. Roger Boyd, Professor and Chair of Biology and Director of Natural Areas for the school, has stated in written comments responding to the Corps' Draft EIS that the financial resources available to the university for future management of Baker Wetlands are uncertain. Under the 42nd Street Alignment A Alternative, this financial uncertainty will remain because this alternative would not impact the Baker Wetlands, and therefore would not include mitigation measures pertaining to the management of the Baker Wetlands. The 32nd Street

Alignment B Alternative includes funding for management of the Baker Wetlands as a mitigation measure for impacts to the Baker Wetlands.

c. Other Environmental Impacts

Relocations and Farm Severances

The 42nd Street Alignment A Alternative would result in three residential relocations, one business relocation, and 12 farm severances.

Floodplain and Floodway Impacts

The 42nd Street Alignment A Alternative passes through approximately 1.7 miles of the Wakarusa River floodplain east of Haskell Avenue and crosses the floodway on an approximately 3,700-foot-long bridge. West of Haskell Avenue, this alignment passes through the Wakarusa River floodplain for a distance of approximately 3200 feet and connects with US-59 Highway near 35th Street. This alignment crosses both branches of the Wakarusa River floodway west of Haskell Avenue for a total distance of approximately 900 feet. The sections of roadway within the floodway will be bridged. This alignment also crosses the floodplain of a minor Wakarusa River tributary for a distance of approximately 600 feet.

In regard to riparian and floodway impacts, it was determined that the 42nd Street Alignment A Alternative would include two new crossings of the Wakarusa River and its floodways, resulting in at least 5.2 acres of riparian woodland impacts and bridging approximately 4600 feet of floodway.

Wetland Impacts

The 42nd Street Alignment A Alternative will not directly impact the Baker Wetlands, but will result in impacts to 3.07 acres of wetlands and 1.38 acres of open water in ponds along its alignment. To mitigate for the total wetland losses of 4.45 acres, a total of approximately 80 acres of wetlands will be created for a net gain of approximately 75.5 acres of wetlands.

Stream Impacts

The 42nd Street Alignment A Alternative will include eight stream crossings (five will be bridged), equating to 1100 linear feet of stream impacts.

Woodland Impacts

The 42nd Street Alignment A Alternative will impact 5.2 acres of riparian woodlands and 18.2 acres of upland woods.

Noise Impacts

The 42nd Street Alignment A alternative, was modeled without noise walls. Noise impacts are significant under this alternative due to the introduction of a highway in an area with little development and minimal traffic noise.

Visual Impacts

The 42nd Street Alignment A Alternative will have no visual impact on the HINU campus, however, 31st Street will remain with its associated visual impact on HINU's southern campus. This alignment will not have a direct visual impact on Baker Wetlands, but the mainline bridge west of the Baker Wetlands will be observable by visitors in the wetlands. In addition, this alignment will have a high degree of visual impact to the rural landscape south of the Wakarusa River, which is an area of very low density development.

F. Measures to Minimize Harm

The minimization and mitigation measures described in the following section pertain to, and are based on the Corps' designation of the 32nd Street Alignment B Alternative as the Selected Alternative in the Final EIS.

1. TRIBAL CONSULTATION

The Corps conducted an extensive coordination and consultation process with all federally recognized Native American tribes. In addition, the Corps requested comments from the HINU administration, the HINU Board of Regents, the BIA and other organizations and individuals that have expressed an interest in Native American issues related to this project. The Corps used the insight gained through the public interest review for this project to identify avoidance, minimization and mitigation measures that address Native American concerns, where practicable.

2. MINIMIZATION AND MITIGATION MEASURES

There are a number of minimization and mitigation measures included in conceptual designs and plans for alternatives that will impact historic properties. These measures include minimizing the width of the bypass corridor through the Haskell Agricultural Farm Property, bridging historic engineering structures in the HAFP; removal of 31st Street from HINU property and conversion of that area to wetlands; and acquisition, conservation, and preservation of adjacent lands to reduce foreseeable cumulative future development-related impacts. Proposed mitigation concepts are shown on Exhibits 4f-10 and 4f-11. Additional measures that are considered include:

- Construction sequencing and methodology to minimize impacts
- Screening and profile minimization for bypass structures
- Noise and light mitigation
- Development of historic and cultural programs
- Recording of historic structures within the Haskell Agricultural Farm Property
- No clearing and grubbing on Haskell Agricultural Farm Property

A final, detailed plan was developed by the Corps and the Kansas Department of Transportation to minimize and mitigate impacts from the 32nd Street Alignment B Alternative (Selected Alternative) to the historic features of the Haskell Agricultural Farm Property. This plan was memorialized in a formal Memorandum of Agreement (MOA) and signed by the Corps of Engineers, the Kansas State Historic Preservation Officer, and the Advisory Council on Historic Preservation (A fully executed MOA is contained in Appendix B). This agreement indicates that there is broad agency support for building the Selected Alternative as long as mitigation measures are carried out.

The MOA completed requirements of the National Historic Preservation Act (Section 106), and allowed completion of the Environmental Impact Statement for the South Lawrence Trafficway project. The Corps of Engineers recognized the mitigation and minimization measures of the MOA as stipulations of its permit (see Appendix C). The Corps and FHWA will work together to monitor completion of all programs required by the MOA. The following text discusses these issues and their relation to the Corps' decision to select the 32nd Street Alignment B Alternative.

- The Kansas Department of Transportation shall relocate the existing section of 31st Street (located on the HINU campus) to an alignment immediately north of the Kansas Highway 10 (32nd Street Alignment B) on Baker University property in Baker Wetlands (See Attachment A). The Kansas Department of Transportation shall remove the

abandoned section of 31st Street, including bedding material, located on the HINU campus and shall grade the vacated right-of-way to approximate the contours/elevations of existing adjacent ground. The Kansas Department of Transportation shall confer with HINU/BIA representatives to develop and implement a vegetative planting scheme for the vacated 31st Street right-of-way.

- Douglas County, Kansas shall vacate the section of 31st Street located on the HINU campus and shall relinquish its easement for the right-of-way to the United States of America.

- The Kansas Department of Transportation shall relocate Haskell Avenue approximately 1,000 feet east of its present location and Louisiana Street approximately 2,500 feet west of its present location for those sections of the roads located adjacent to that portion of the Haskell Agricultural Farm Property located in Baker Wetlands (See Attachment A). The Kansas Department of Transportation shall remove the abandoned sections of Haskell Avenue and Louisiana Street and grade the right-of-ways to approximate the contours/elevations of the existing adjacent ground. The Kansas Department of Transportation shall ensure that approximately 304 acres of mitigation wetlands will be developed in the areas created between the relocated and vacated roads (See Attachment A). The Kansas Department of Transportation shall convey a conservation easement in accordance with K.S.A. 58-3810, et. seq., on the approximately 304 acre wetland mitigation area, to limit its future use to that consistent with this agreement, prior to a transfer of the property to a second party.

- The Kansas Department of Transportation shall ensure that the width of the roadway corridor within the Haskell Agricultural Farm Property is the minimum necessary to accommodate the eventual construction of a four-lane Kansas Highway 10 bypass and relocation of 31st Street with four lanes. The Kansas Department of Transportation shall ensure that the roadways, medians between opposing lanes, and the roadway shoulders are the minimum width necessary to satisfy highway transportation safety standards in order to minimize the adverse impact of the roadway corridor on the Haskell Agricultural Farm Property (see Exhibit 4f-12).

- The Kansas Department of Transportation shall construct a 12-foot-high wall (as measured from the roadway surface) along the north side of the highway bypass and a 6-foot-high wall located on a 6-foot-high berm (the top of the wall will be located 12 feet above the roadway surface) on the south side of the bypass along that portion of the bypass located within the Haskell Agricultural Farm Property to minimize traffic noise and visual disturbance in areas outside the bypass corridor (See Attachment B). The walls shall be painted/tinted to blend with the background and shall be screened with vegetation plantings to obscure their presence from areas outside the roadway corridor.

- The Kansas Department of Transportation shall develop and implement a plan to minimize construction-related impacts to the Haskell Agricultural Farm Property. The plan must be approved by Corps and shall be incorporated into the special conditions of Corps' Section 404 authorization for the undertaking. All construction equipment shall be either low ground pressure types or be required to operate on log mats. No grubbing will be allowed within the Haskell Agricultural Farm Property (cutting woody vegetation will be allowed.) No staging areas or lay down yards will be located in the Haskell Agricultural Farm Property. Construction of the roadway embankment within the Haskell Agricultural Farm Property will be limited to 300-meter-long sections at any one time.

- The Kansas Department of Transportation shall ensure that the final roadway design will minimize adverse impacts to the Haskell Agricultural Farm Property, to the maximum extent practicable. The Kansas Department of Transportation shall also ensure that the final roadway design will avoid the historic east-west dike and drainage canal located immediately south of the existing 31st Street between Haskell Avenue and Louisiana Street, all historic water control gate structures, and all historic bridges within the Haskell Agricultural Farm Property.

- The Kansas Department of Transportation shall document the Haskell Agricultural Farm Property features impacted by the undertaking by preparing a permanent record of the features through use of photographs, detailed drawings, and a narrative, as appropriate. The Kansas Department of Transportation shall consult with and take direction from the SHPO to ensure preparation of a complete record.

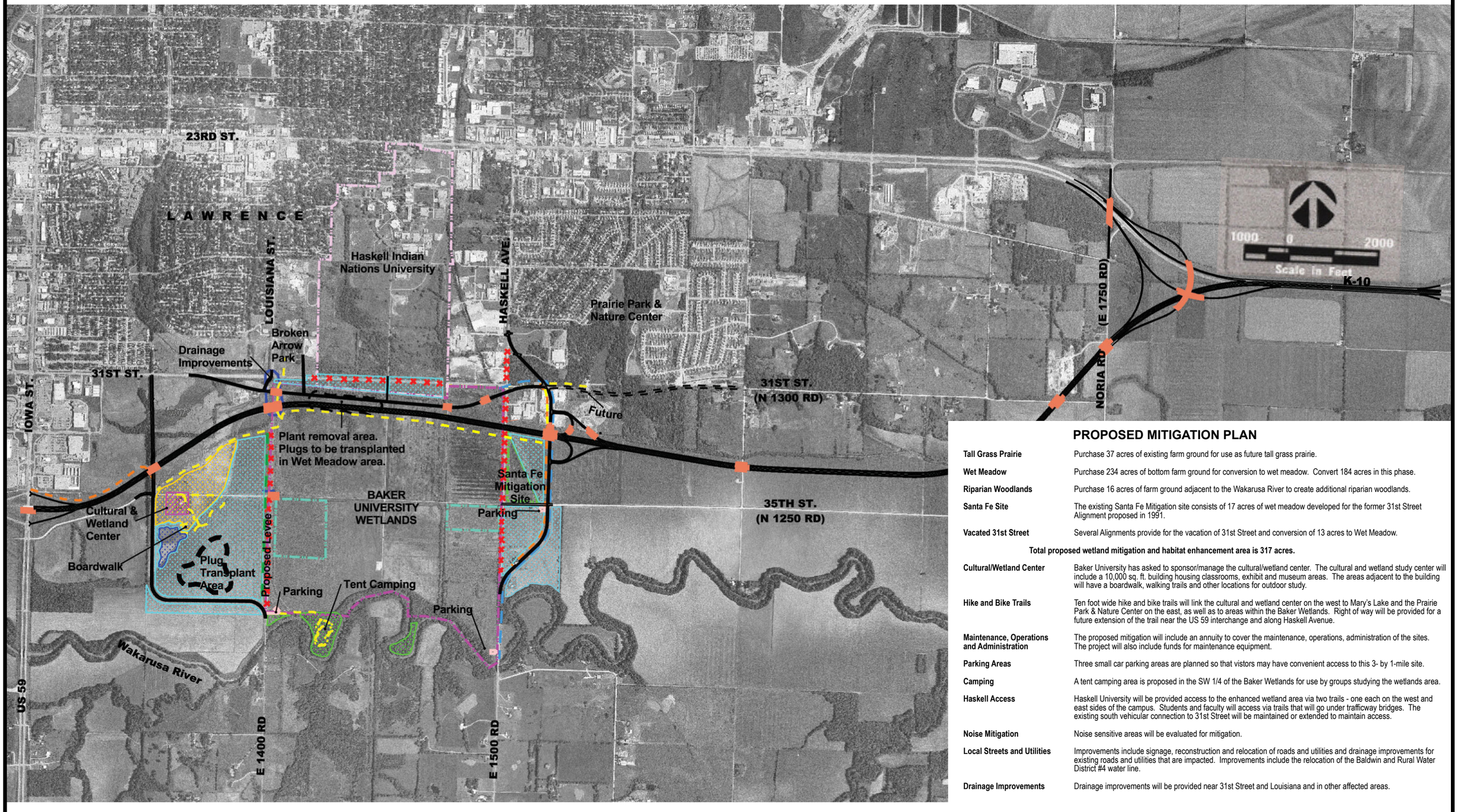
- If the Kansas Department of Transportation determines that lighting is required for traveler safety within that portion of the undertaking located within the Haskell Agricultural Farm Property, it shall limit such lighting to the minimum necessary to ensure traveler safety and shall install such lighting in a manner that will minimize impacts to areas outside the roadway corridor.

- The Kansas Department of Transportation shall monitor construction activities and shall inform all contractors to be alert to the potential for the discovery of cultural resources. If artifacts or previously unidentified archaeological sites are encountered, or if the undertaking will result in unanticipated effects to an existing historic property, KDOT shall stop construction activities that have a potential to impact such properties and shall immediately notify the Corps and the SHPO that such action has taken place. In the event of such notification, the Corps will consult with the SHPO and other interested parties, as necessary, to determine an appropriate course of action.

- If human remains are discovered, all work within the area of discovery shall stop immediately, the area shall be protected from further disturbance, and local law enforcement and the State Archaeologist shall be contacted immediately, in accordance with the Kansas Unmarked Burial Sites Preservation Act (K.S.A. 75-2741 through 75-2754). In the event of a discovery of human remains KDOT shall comply with all provisions of the Unmarked Burial Sites Preservation Act.

- The Kansas Department of Transportation shall invite all Kansas reservation tribes to provide a representative to monitor all project-related excavation activities within the Haskell Agricultural Farm Property for the inadvertent discovery of unmarked burials. The Kansas Department of Transportation shall also accommodate any federally recognized tribe that wishes to monitor excavation activities within the Haskell Agricultural Farm Property. The Kansas Department of Transportation shall have the right to limit the number of tribal monitors on the construction site to a total of five, at any given time, and to impose such additional safety restrictions on monitors as it deems appropriate. Nothing in this stipulation shall require construction activities to be delayed due to the inability of monitors to be present on site during excavation activities.

KDOT has also worked closely with Baker University representatives to develop mitigation measures for the 32nd Street Alignment B Alternative. Discussions between KDOT and the University have produced a comprehensive mitigation plan directed at addressing impacts to wetlands.



PROPOSED MITIGATION PLAN

Tall Grass Prairie	Purchase 37 acres of existing farm ground for use as future tall grass prairie.
Wet Meadow	Purchase 234 acres of bottom farm ground for conversion to wet meadow. Convert 184 acres in this phase.
Riparian Woodlands	Purchase 16 acres of farm ground adjacent to the Wakarusa River to create additional riparian woodlands.
Santa Fe Site	The existing Santa Fe Mitigation site consists of 17 acres of wet meadow developed for the former 31st Street Alignment proposed in 1991.
Vacated 31st Street	Several Alignments provide for the vacation of 31st Street and conversion of 13 acres to Wet Meadow.
Total proposed wetland mitigation and habitat enhancement area is 317 acres.	
Cultural/Wetland Center	Baker University has asked to sponsor/manage the cultural/wetland center. The cultural and wetland study center will include a 10,000 sq. ft. building housing classrooms, exhibit and museum areas. The areas adjacent to the building will have a boardwalk, walking trails and other locations for outdoor study.
Hike and Bike Trails	Ten foot wide hike and bike trails will link the cultural and wetland center on the west to Mary's Lake and the Prairie Park & Nature Center on the east, as well as to areas within the Baker Wetlands. Right of way will be provided for a future extension of the trail near the US 59 interchange and along Haskell Avenue.
Maintenance, Operations and Administration	The proposed mitigation will include an annuity to cover the maintenance, operations, administration of the sites. The project will also include funds for maintenance equipment.
Parking Areas	Three small car parking areas are planned so that vistors may have convenient access to this 3- by 1-mile site.
Camping	A tent camping area is proposed in the SW 1/4 of the Baker Wetlands for use by groups studying the wetlands area.
Haskell Access	Haskell University will be provided access to the enhanced wetland area via two trails - one each on the west and east sides of the campus. Students and faculty will access via trails that will go under trafficway bridges. The existing south vehicular connection to 31st Street will be maintained or extended to maintain access.
Noise Mitigation	Noise sensitive areas will be evaluated for mitigation.
Local Streets and Utilities	Improvements include signage, reconstruction and relocation of roads and utilities and drainage improvements for existing roads and utilities that are impacted. Improvements include the relocation of the Baldwin and Rural Water District #4 water line.
Drainage Improvements	Drainage improvements will be provided near 31st Street and Louisiana and in other affected areas.

LEGEND

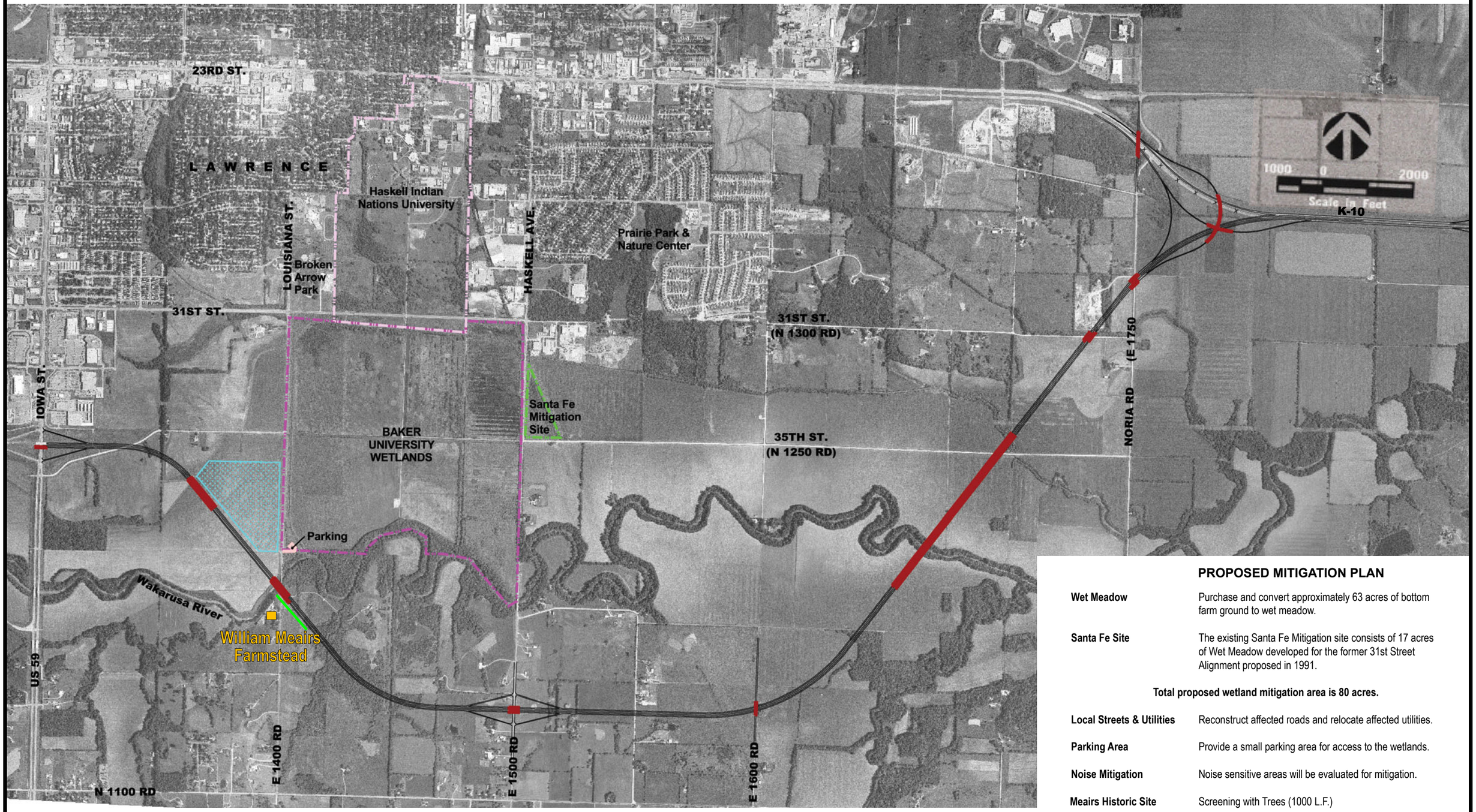
- Hike & Bike Trail
- Trail Right-of-Way
- Tallgrass Prairie
- Wet Meadow
- Riparian Woodland
- Open Water
- Cultural & Wetland Center
- Parking Area
- Virgin Wet Prairie
- 32nd Street Alignment B
- Anticipated Bridge Locations
- Proposed Levee
- Water Line Replacement
- Water Control Structure
- Street Removal
- Baker University Wetlands
- Haskell University Property
- Santa Fe Mitigation Site

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-10
Proposed Mitigation Plan
32nd Street Alignment

12/05/02 Revised 08/22/06



PROPOSED MITIGATION PLAN

Wet Meadow	Purchase and convert approximately 63 acres of bottom farm ground to wet meadow.
Santa Fe Site	The existing Santa Fe Mitigation site consists of 17 acres of Wet Meadow developed for the former 31st Street Alignment proposed in 1991.

Total proposed wetland mitigation area is 80 acres.

Local Streets & Utilities	Reconstruct affected roads and relocate affected utilities.
Parking Area	Provide a small parking area for access to the wetlands.
Noise Mitigation	Noise sensitive areas will be evaluated for mitigation.
Meairs Historic Site	Screening with Trees (1000 L.F.)

LEGEND

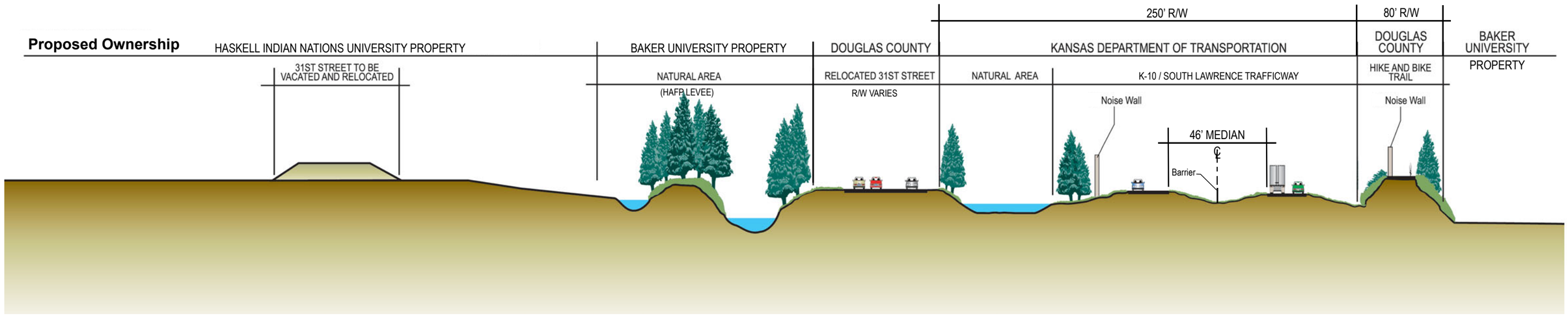
- Wet Meadow
- Santa Fe Mitigation Site
- Parking Area
- Baker University Wetlands
- 42nd Street Alignment A
- Anticipated Bridge Locations
- Haskell University Property
- Meairs Historic Site Screening

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-11
Proposed Mitigation Plan 42nd Street Alignment

12/05/02 Revised 08/23/06



Cross Section as per Final Grading Plans approved October 2003.

12/05/02 Revised 03/20/07

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-12
Cross Section of SLT with Mitigation

The Corps determined that direct impacts to Baker Wetlands will be mitigated through creation of very similar, new wetlands (at a 6:1 ratio – six acres created for each acre filled), resulting in a net gain of approximately 259 acres of wetlands. This substantial size increase provides ecological advantages in that it creates a more complex system. This mitigation proposal will create a permanent buffer (protected in perpetuity from development) along the east and west sides of the southern half of the Farm Property (Baker Wetlands) and will protect the Property from noise, light, urban debris and visual disturbance.

The plan also includes funds for a 10,000 square foot Wetland and Cultural Educational Center which will highlight the history of the Baker Wetlands in relation to the Haskell Agricultural Farm Property. Baker University will assume responsibility for operation and management of the Educational Center and mitigation areas. Funds for an annuity will be provided to Baker University for maintenance, operation and administration of the expanded Baker Wetlands complex and the Educational Center. Hike and bike trails will be constructed to provide enhanced access to Baker Wetlands. Three small parking areas will also be constructed to enhance access to the property. Campsites will also be developed in the mitigation area. Pedestrian access will be provided to Baker Wetlands from Broken Arrow Park and from the southeast corner of the HINU campus. The existing north-south road in the center of the HINU campus will be extended to the relocated 31st Street.

Mitigation will also include routing road runoff east-west through ditches within the roadway corridor to existing drainages outside the Farm Property. This proposal would prevent contaminated runoff from entering the Farm Property (Baker Wetlands).

As discussed previously, noise walls will be constructed along the 32nd Street Alignment B Alternative to minimize traffic noise and to visually screen traffic from areas outside the bypass alignment. Light and roadway debris will also be contained by the walls. Walls will not be constructed along the relocated 31st Street roadway. It has been determined that noise and visual disturbances associated with the relocated 31st Street will be similar to or less than they will be if the road is not relocated.

Noise studies have shown that the total audible disturbance associated with the 32nd Street Alignment B Alternative, with the mitigation described above, will be less by the year 2025 (ending year for local land use planning) than noise disturbances associated with the No-Action or 42nd Street alignment alternatives. These findings would result from construction of noise walls along the bypass, and relocation of Haskell Avenue and Louisiana Street which moves traffic away from the Farm Property and creates a development and traffic free buffer along the property's southern east and west border. A number of field receptor locations and modeled receptor locations were located adjacent and near the no-build, 31st Street, 32nd Street, 35th Street, 38th Street, and 42nd Street alternatives. The analysis included with and without the barrier for the 31st and 32nd Street alternatives.

3. SUMMARY OF ALL MITIGATION ASSOCIATED WITH THE 32ND STREET ALIGNMENT B ALTERNATIVE

The following section summarizes mitigation developed for the 32nd Street Alignment B Alternative.

CREATION OF WETLANDS
DESCRIPTION: In order to compensate for the loss of approximately 58 acres of wetlands as a result of construction of the Selected Alternative, a total of approximately 304 acres of farmland adjacent to Baker Wetlands (east of Haskell Avenue and

west of Louisiana Street) will be purchased and converted to wetlands. An additional 13 acres of wetlands will be created on the vacated 31st Street roadbed located on HINU property. KDOT will provide funds to Baker University for an annuity that will support Baker University's efforts to manage the expanded Baker Wetlands complex.

PRIMARY FUNCTION:

The primary function of this mitigation component is to compensate for wetland losses associated with the project.

SECONDARY BENEFITS:

An additional benefit will be protection of the Haskell Agricultural Farm Property from adjacent urban development, and as a result will protect the HAFP from noise, light, urban debris, and visual disturbances associated with foreseeable future development and associated traffic in the vicinity of the properties.

RELOCATION OF ADJACENT ROADWAYS

DESCRIPTION:

The section of 31st Street located on HINU property between Haskell Avenue and Louisiana Street will be relocated to Baker Wetlands on an alignment parallel to and immediately north of the Selected Alternative. The vacated 31st Street roadbed will be graded and seeded/plugged to create open landscape (approximately 13 acres of wetlands) similar to that in Baker Wetlands. The final condition of the vacated road will be determined through consultation with Bureau of Indian Affairs/HINU representatives.

Haskell Avenue will be relocated approximately 1,000 feet east of its present location and Louisiana Street will be relocated approximately 2,500 feet west of its present location to facilitate creation of approximately 304 acres of wetlands adjacent to Baker Wetlands. The vacated roadbeds will be converted to wetlands.

PRIMARY FUNCTION:

31st Street will be relocated to offset impacts to the Haskell Agricultural Farm Property. Relocation of the road to an alignment immediately adjacent to the bypass in Baker Wetlands will reduce the number of roadway corridors within the Farm Property from two to one. The consolidated corridor will substantially reduce the visual impact of routing two roads through the Property.

Relocation of Haskell Avenue and Louisiana Street will facilitate the creation of 304 acres of wetlands adjacent to Baker Wetlands and will ensure that mitigation wetlands become an integral part of the Baker Wetlands complex.

SECONDARY BENEFITS:

Relocation of 31st will satisfy a request by the BIA/HINU administration that the road be removed from the campus. The relocation will also reduce traffic-related noise, light and visual disturbances on the HINU campus.

Relocation of Haskell Avenue and Louisiana Street will reduce traffic-related noise, light and visual disturbances to the Baker Wetlands National Natural Landmark and the Haskell Agricultural Farm Property.

WETLAND AND CULTURAL EDUCATIONAL CENTER

DESCRIPTION:

An approximately 10,000 square foot Wetland and Cultural Educational Center will be constructed on mitigation land west of Louisiana Street. Baker University will own and manage the center. KDOT will provide funds for an annuity to maintain, construct, and operate the center.

PRIMARY FUNCTION:

The educational center will attract visitors to the wetland area and will provide an educational and research facility.

SECONDARY BENEFITS:

The center could be used to provide insight into the history of the area, including the events and cultural history associated with the Haskell Agricultural Farm Property.

HIKE AND BIKE TRAILS, CAMP SITES AND PARKING
DESCRIPTION: Hike and bike trails are planned from US-59 to Haskell Avenue. The trails will connect the cultural center on the west with Baker Wetlands and Mary's Lake on the east. Three small parking areas will be constructed to enhance access to the wetlands. Campsites will also be developed in the mitigation area.
PRIMARY FUNCTION: Development of a visitor-oriented infrastructure will promote public use of the area and will enhance educational efforts related to wetlands and the area's history.
SECONDARY BENEFITS: These facilities will provide additional recreational opportunities to the Lawrence community.

NOISE WALLS
DESCRIPTION: A 12-foot-high wall (12 feet high as measured from the roadway surface) will be constructed along the north side of the four-lane bypass and a 6-foot-high wall (located on a 6-foot-high berm with a hike and bike trail) will be constructed on the south side of the bypass. The walls will be painted/tinted to blend with the background and will be screened with vegetative plantings to obscure their presence from outside the bypass corridor. Walls will not be constructed along relocated 31st Street.
PRIMARY FUNCTION: The primary function of the walls will be to attenuate noise that may affect HINU, the Haskell Institute Historic District and the Baker Wetlands National Natural Landmark.
SECONDARY BENEFITS: Light and roadway debris will also be contained by the proposed walls.

4. MEMORANDUM OF AGREEMENT

A Section 106 Memorandum of Agreement (MOA) has been developed in cooperation with the State Historic Preservation Office (SHPO), Advisory Council on Historic Preservation (ACHP), Kansas Department of Transportation (KDOT), property owners and others as appropriate to define the measures necessary to mitigate the adverse effect to the Haskell Agricultural Farm Property. The existing MOA was amended, with FHWA becoming a signatory. The executed MOA is contained in Appendix B.

G. Coordination

In April of 2006, the FHWA submitted a Notice of Intent to the *Federal Register* to adopt the 2003 Final Environmental Impact Statement that was written for the proposed South Lawrence Trafficway highway project. The EIS was prepared by the U.S. Army Corps of Engineers, Kansas City District, as part of a Section 404 Permit Application.

As part of the early coordination process, the FHWA sent to all the recipients of the Final EIS a letter informing them that the FHWA in cooperation with the Kansas Department of Transportation intends to adopt the Final EIS in accordance with the Council on Environmental Quality's Regulations. The letter was dated April 6, 2006, and also informed the recipients the intent by FHWA to prepare and process an individual Section 4(f) Evaluation and then conclude the decision-making process with the preparation and approval of its own Record of Decision. A 45-day comment period was provided for comments concerning FHWA's intent to adopt the Final EIS and the comment period ended May 31, 2006.

On May 9, 2006, the FHWA and KDOT met with the Advisory Council on Historic Preservation in Washington D.C. to discuss the project status, and Section 106 requirements.

On June 20, 2006, Dr. Roger Boyd of Baker University led a field review of the Baker Wetlands for KDOT and FHWA personnel. Dr. Boyd discussed the history and features of the Baker Wetlands.

Public Review

The initial public review period for the Draft Section 4(f) Evaluation ran from November 14, 2006 to January 5, 2007. In addition, the FHWA granted a request for a longer review period, consequently extending the comment period to January 19, 2007.

A public open house concerning the Draft Section 4(f) Evaluation was held at the National Guard Armory in Lawrence on Thursday, December 14, 2006. Approximately 140 people attended the open house, which ran from 10:00 a.m. to 7:00 p.m. and was hosted by the Federal Highway Administration (FHWA) with assistance from KDOT as part of the FHWA's Draft Section 4(f) Evaluation process. Public meetings are not required for the process, but the FHWA wanted to inform people and get comments about the potential impacts of two alternative alignments on the historic nature of the Haskell Agricultural Farm Property (a portion of which includes land now known as the Baker Wetlands) and the William Meairs Farmstead, located south of the Wakarusa River.

Many visitors at the public open house expressed their preference for an alternative, some were concerned about how Native American heritage in the area would be affected, and some questioned the need for the Trafficway altogether. Guests also commented about potential impacts to the Baker Wetlands natural environment, although that was not the focus of the open house.

Summary of Comments

Forty-seven (47) written comments and 24 comments spoken to a court reporter were received during the public open house. The FHWA added these comments to the other comment forms and letters it received during the initial comment period and during the extension period, which ended on January 19, 2007, resulting in a total of 228 comments. In general, most of the comments regarded either approval of, or opposition to the alternatives presented in the Draft Section 4(f) Evaluation. A summary of the general nature of the comments is presented in Table 2.

Table 2 – Summary of Comments

General Comment	No. of Applicable Comments
Favor 32nd Street B Alignment	120
Favor 42nd Street A Alignment	52
Oppose alignment through the wetlands/HAFP	17
Favor No-Action Alternative	14
Build trafficway on another route	12
Build either alignment (32nd B or 42nd A)	8
Oppose 42nd Street A Alignment	1
Concur with whatever HINU wants	1
Involve HINU if 32nd Street alignment is chosen	1
Request extension of comment period	1
No comment / no concerns	1

Responses to substantive comments received during the public review period for the Draft Section 4(f) Evaluation are discussed in section H of this document.

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Request extension of comment period	1
No comment / no concerns	1

Responses to substantive comments received during the public review period for the Draft Section 4(f) Evaluation are discussed in section H of this document.

H. Responses to Comments

All comments that were received during the public review period were considered and reviewed to determine which specific comments were considered to be substantive and in need of a response.

In the subsequent text, the substantive comments are grouped by specific subject matter, with a response following each one. Comment letters received from agencies, organizations, and various public entities can be found in Appendix E. All comment letters and forms are available on CD upon request, or on the KDOT website at www.southlawrencetrafficway.org. All comment letters/forms on the CD have been assigned an identification number. The ID numbers for the letters in Appendix E are noted on the "List of Comment Letters" at the front of Appendix E.

Comment 1: *Oppose 42nd A Alternative – Cost is excessive*
(Comment ID Numbers – 95, 166, 167, 177)

Response: The 42nd Street Alignment A Alternative is one mile longer and crosses the Wakarusa River twice with long bridges. As a result, the 42nd Street alignment costs more than the 32nd Street Alignment B Alternative. These factors are essential in determining which alternative is feasible and prudent, and best serves the overall public interest.

***Reference*:** Section E.2.c. Floodplain and Floodway Impacts; and Response to Comment 10.

Comment 2: *Oppose 42nd A Alternative – It is more harmful to the environment, more area is impacted, additional natural resources are needed for its construction, more vehicle emissions will occur from longer trips, and it will encourage urban sprawl south of the river.*
(Comment ID Numbers – 31, 95)

Response: These factors are essential in determining which alternative is feasible and prudent, and best serves the overall public interest.

***Reference*:** Section E.2.

Comment 3: *Oppose 42nd A Alternative – Too far south for local traffic to use*
(Comment ID Numbers – 100, 166)

Response: This factor is essential in determining which alternative is feasible and prudent, and best serves the overall public interest.

Comment 4: *Oppose 42nd A Alternative – Historic trails and sites are impacted*
(Comment ID Numbers – 20, 84, 119, 184)

Response: The Blanton's (Bridge) Crossing area is a "High Potential Site" identified by the National Park Service (NPS) trail management plan as part of the Oregon and California National Historic Trail. The 42nd A Alternative is near the crossing and the NPS urges protection of the high potential sites as important trail resources. Although the 42nd Street A Alternative would avoid direct impacts to Blanton's Crossing and would have no adverse effect on the

National Register eligible Meair's Farmstead (see letter dated March 13, 2007 in Appendix D), the Oregon and California Trail ran through this area and the historic importance of this area in the history of western migration and of "Bleeding Kansas" are essential factors to be considered in determining which alternative is feasible and prudent, and best serves the overall public interest.

(The SHPO, in a letter dated October 4, 2001, determined that the area within the defined boundaries of the Blanton's Crossing site 14DO328 was not considered eligible for listing on the National Register. The SHPO also stated that *"…many of the claims for archaeological potential and "significance" are located farther to the east at the location of the natural ford crossing of the river."*)

***Reference*:** Section E.2.a. and Exhibit 4f-9.

Comment 5: *42nd Street A Alternative will have secondary impacts because of increased traffic on side roads.* (Comment ID Numbers – 98, 100, 167, 184)

Response: Growth south of the Wakarusa River will most likely occur at some point in the future no matter which alignment is built. However, as the text states, the 42nd Street A alignment will "accelerate" development south of the river. Whenever that development occurs, traffic on Haskell Avenue and Louisiana Streets will increase, as these are the primary north/south routes from Lawrence to the areas south of the river. Traffic will also increase on 31st Street. As a result, these streets will most likely require expansion from two lanes to four lanes, thereby causing increases in noise, light, urban debris, and visual disturbances (see section E.2.b, traffic volume forecast in Appendix F, and Response to Comment 19). As part of the 32nd Street B alignment, Haskell Avenue and Louisiana Street will be relocated, moving them away from the Baker Wetlands in order to allow for wetland mitigation areas. Although the secondary impacts from the streets will not be mitigated for, the wetland mitigation areas will provide a buffer between the existing Baker Wetlands and the relocated streets.

The secondary impacts on the Haskell Agricultural Farm Property, due to increased traffic are essential factors in determining which alternative is feasible and prudent, and best serves the overall public interest.

***Reference*:** Section E.2.b., Appendix F, and Response to Comment 19.

Comment 6: *Support 32nd Street B Alternative – Net benefits: enhances wetlands, improves traffic, improves access to Baker Wetlands, buffer zone protects wetlands.*
(Comment ID Numbers – 56, 98, 167)

Response: The net benefits of the 32nd Street B Alternative (traffic improvements, additional wetland acreage, relocation of adjacent roadways, wetland/cultural education center, hike/bike trails, camp sites, parking) are essential factors in determining which alternative is feasible and prudent, and best serves the overall public interest.

***Reference*:** Section F. and section I.7.b.

Comment 7: *Oppose 32nd Street B Alternative – Impacts historic trail ruts in Baker Wetlands*
(Comment ID Number – 69)

Response: According to the sign/marker on the north end of the Baker Wetlands, the "Historic Oregon Trail Crossing" was at one time in this location. The interpretive map at the Baker Wetlands kiosk shows that the trail traveled north/south through the middle of the west half of the Baker Wetlands. However, there is no mention of visible ruts/swales of the Oregon Trail in this location on the National Park Service's list of High Potential Sites in their "Management and Land Use Plan/Final Environmental Impact Statement" dated 1995, which lists known locations of visible ruts/swales. (The southwest quadrant of the Baker Wetlands had been cultivated in the early 1900s and used as cropland. The northwest quadrant was used as a hay meadow in the early 1900s and had been used as pasture in later years. The dominant herbaceous vegetation was smooth brome and Kentucky bluegrass. Both of these grasses are non-native, and as such, were most likely planted at some point in time with cultivation equipment, thereby disturbing the ground.)

Comment 8: *Oppose 32nd Street B Alternative – It will deter access and use of the wetlands*
(Comment ID Number – 219)

Response: The 32 B Alternative will actually increase the access to the wetlands by the addition of 4 new parking areas including the parking area to be built at the new Wetland Center just East of the relocated Louisiana Street. The alternative also includes hiking and biking paths from the wetland center to Louisiana Street along the full length of the wetlands to Haskell Avenue. This path will include access under K-10 at both Louisiana and Haskell, so no at grade crossing will be required to access the wetlands. These are essential factors in determining which alternative is feasible and prudent, and best serves the overall public interest.

***Reference*:** Sections F.2 and 3.

Comment 9: *Oppose 32nd Street B Alternative – It fails to acknowledge the growth patterns to the south and future transportation needs.* (Comment ID Numbers – 159, 184, 223, 224)

Response: The 32nd Street B Alternative acknowledges that growth will occur to the south, which will result in increased traffic on Haskell Avenue and Louisiana Street. This alternative includes relocation of these two streets to allow for wetland mitigation areas adjacent to the existing Baker Wetlands. Although these street relocations will minimize impacts on the HAFP from traffic and development, the purpose is for wetland mitigation areas, not for mitigation of secondary impacts. The 42nd Street A Alternative does not allow for relocation of these two streets because it does not directly impact the Baker Wetlands and, therefore, does not require wetland mitigation of that area. Increased traffic (and widening) on Haskell and Louisiana, and potential future development near the Baker Wetlands are reasonably foreseeable cumulative future impacts associated with the 42nd Street A Alternative, and are likely to be significant. This is one of the determining factors that is considered in determining which alternative is the most feasible and prudent, and best serves the overall public interest.

Comment 10: *Inaccurate costs for 42nd Street A Alternative*
(Comment ID Numbers – 3, 108, 184, 219, 224)

Response: Cost estimates have been revised to reflect 2007 pricing, indicating that the 42nd Street Alignment A Alternative would cost approximately $19 million more than the 32nd Street Alignment B Alternative.

Cost Item (Dollars in Millions)	Preferred (32B)	Avoidance (42A)
Mitigation	22.1	2.0
Road Construction	56.2	43.4
Bridge Construction	35.9	82.6
Utility Relocation	0.8	0.6
Preliminary Engineering	11.4	12.8
Construction Engineering	9.1	10.2
Right of Way & Displacement	12.4	15.3
Total Project	**147.9**	**166.9**
Operation and Maintenance	0.213	0.246

Bridges are a major part of the cost and are necessary when crossing the "floodway" (a no-rise area). The bridge located between E 1600 Road and E 1700 Road that crosses the floodway, would also need to cross N 1250 Road and Naismith Creek. Even a 42nd Street alignment that would extend straight west and intersect with US59 south of the river would not eliminate a bridge. This alignment, which was included and evaluated in the Corps' Final EIS (called the 42nd Street B Alternative), had to cross a wide floodway of a tributary of the Wakarusa River and it required a longer bridge in that area than did Alignment A, thereby increasing the cost. In addition, Alignment B would not meet driver expectations in regard to system continuity, and it was not chosen as a preferred alternative in the Final EIS.

Although cost is an import factor in the evaluation, it is only one of many factors considered and is not the determining factor in the final decision. The final decision is based on a determination of which alternative is the most feasible and prudent and best serves the overall public interest, including net benefits.

Comment 11: *Inaccurate costs for 32nd Street B Alternative* (Comment ID Numbers – 176, 224)

Response: Cost estimates have been revised to reflect 2007 pricing, and include all mitigation measures in the cost (see revised cost estimate table in response to comment above).

***Reference*:** See revised cost estimate in Comment 10 above.

Comment 12: *Bypass farther south should be studied* (Comment ID Numbers – 97, 159, 184)

Response: A very large number of alternatives could be considered for this project by reshaping the proposed alignments, moving alignments farther south, or by moving alignments laterally across the floodplain in an effort to identify every conceivable alternative route. Such efforts are not anticipated, encouraged, or required under NEPA. In addition, a bypass farther to the south would not meet the purpose and need of the project in regard to alleviating traffic on Lawrence city streets.

The Corps' EIS addressed five potential roadway corridors and twelve reasonable individual alternative alignments within those corridors. Two reasonable alternatives were identified within the 42nd Street corridor south of the Wakarusa River. The two 42nd Street alternatives considered in the EIS, alignments A and B, represent reasonable alternatives within the corridor that achieve the purpose and need for the project, and are feasible from a technical perspective.

The identification and discussion of reasonable alternatives within the Corps' EIS met both the spirit and intent of NEPA implementing regulations.

Comment 13: *4(f) process is inadequate – Not all feasible and prudent avoidance alternatives are included* (Comment ID Numbers – 175, 217, 223, 224)

Response: (Also see response to Comment 12 above.) A request was made to study an additional south-of-the-river alignment called 42D, which would extend farther east of the 42nd Street A Alignment (from Haskell Avenue), to tie into K-10 near Eudora. A conceptual level evaluation was preformed and it was found that this 42D alignment would be approximately 2 miles longer than the 42A alignment, but would cost approximately $500,000 less than the 42A alignment. However, the 42D alignment would impact Blue Mound and the Blue Mound cemetery.

Blue Mound is one of the "High Potential Sites" designated by the National Park Service (NPS) in their Comprehensive Management and Use Plan for historic trails. The NPS describes Blue Mound as *"….a major camping site and the first natural landmark encountered by emigrants, many of whom climbed to the top for the view. Its oval, tree-covered summit, approximately 150 feet high and 0.5 mile long, is one of a series of mounds in this area. John C. Fremont placed signal fires atop the mound in 1843 to summon his Indian hunters. The Oregon-California Trail passed on the south edge of the mound on its way to the Upper Wakarusa Crossing."* There is also a historic cemetery (site 14DO1021) located on the north side of the mound.

The 42D alignment would impact approximately 10 residences as compared to 4 for the 42A alignment. In addition, the 42D alignment would have the same secondary and cumulative impacts on the HAFP as those described for the 42A alignment.

An additional request was received suggesting that an eastern bypass would be a prudent alternative. This alternative would connect I-70 to K-10 with a six-lane bypass to the east of Lawrence, and would include a new bridge over the Kansas River. However, this alternative would not meet the purpose and need of alleviating traffic concerns on the local city street network.

***Reference*:** Response to Comment 12 above.

Comment 14: *Inaccurate information about 42nd Street A Alternative causing more development and traffic adjacent to the HAFP and to the south.*
(Comment ID Numbers – 116, 218, 224)

Response: Growth south of the Wakarusa River will most likely occur at some point in the future no matter which alignment is built. However, as the text states, the 42nd Street A alignment will "accelerate" development south of the river. Whenever that development occurs, traffic on Haskell Avenue and Louisiana Streets will increase, as these are the primary north/south routes from Lawrence to the areas south of the river. Traffic will also increase on 31st Street. As a result, these streets will most likely require expansion from two lanes to four lanes, thereby causing significant increases in noise, light, urban debris, and visual disturbances (see section E.2.b, traffic volume forecast in Appendix F, and Response to Comment 19). As part of the 32nd Street B alignment, Haskell Avenue and Louisiana Street will be relocated, moving them away from the Baker Wetlands in order to allow for wetland mitigation areas.

Although the secondary impacts from the streets will not be mitigated for, the wetland mitigation areas will provide a buffer between the existing Baker Wetlands and the relocated streets.

Although land in the floodplain (outside of the "floodway") is not recommended for urban development, it may be approved if the development complies with the city floodplain regulations.

The secondary impacts on the Haskell Agricultural Farm Property, due to increased traffic and potential development are essential factors in determining which alternative is feasible and prudent, and best serves the overall public interest.

Comment 15: *Inaccurate visual impact assessment* (Comment ID Numbers – 116, 223, 224)

Response: The following is a further explanation regarding the text on Visual Impacts (section D.3.g.):

As shown in Exhibit 4f-12, the dike and trees located on the northern edge of the Baker Wetlands will screen the wall from the HINU south campus wetlands. Relocated 31st Street and the north wall will still be visible from the south side of the dike until the evergreen tree plantings used for screening grow to sufficient height. The south noise wall will be 6 feet high on a 6-foot earthen berm that will be planted with vegetation for screening. This south wall will be visible from the Baker Wetlands south of that berm until the vegetation grows to near the height of the wall. Therefore, the visual impact of the walls on the wetlands will be temporary.

***Reference*:** Section D.3.g. and Exhibit 4f-12

Comment 16: *Inaccurate information – HINU main campus should be included in the HAFP.*
(Comment ID Numbers – 118, 127, 219)

Response: The Corps of Engineers on October 25, 2002, wrote a letter to the Keeper of the National Register of Historic Places asking for concurrence on two National Register eligibility determinations. The first, that the Haskell Indian Nations University and it's adjacent property known as the Baker Wetlands are eligible for listing on the National Register. The second determination was that the Baker Wetlands is not eligible for listing as a Traditional Cultural Property. The entire area, as proposed by the Corps of Engineers, was to be called the Haskell Institute Historic District (HIHD).

The Keeper, the highest authority in the nation on historic matters, concluded on November 7, 2002 that the HIHD was not eligible for listing due to its lack of sufficient integrity, considerable building and modernization and that only a limited number of isolated resources remain on the school campus from the period 1884-1940.

The Keeper did agree that the area known as the Haskell Agricultural Farm Property, including the upper fields (North of 31st Street) and the area within the Baker Wetlands (but excluding the main campus) is eligible for listing (see the next response and Appendix D for a further explanation of the Keeper's finding). This is the reason the FHWA has under taken the 4(f) Evaluation.

***Reference*:** Appendix D. and response to Comment 17 below.

Comment 17: *Inaccurate information – Historical importance of the 4(f) property should not be limited to farm usage (oral history ignored).* (Comment ID Numbers – 157, 217, 219)

Response: In an attachment to the Keeper's Determination of Eligibility, dated November 7, 2002 (see Appendix D), the Keeper explained the reasoning for determining that the area designated as the Haskell Agricultural Farm Property is eligible for the National Register as follows:

> The Keeper's approach eliminated *"….the considerable number of non-historic elements that comprise the current school campus and focuses instead on the few extant historic resources that can directly convey the historic significance of the nationally important school. The former agricultural farm property (Upper Fields and Baker Wetlands) is important because it reflects the essential role of agricultural training in the early history of the Haskell School and the diverse historic uses of the lands to the south of the core campus. While modified, these former agricultural lands still retain the essential physical characteristics associated with this area from the historic period, including lands use patterns, spatial organization, circulation networks, and small scale elements such as the various water control systems and structures."*

In the early history of the Haskell Institute, the school constructed levees, tile fields, drainage canals, and w-ditches to drain the land for agricultural purposes. The farmed areas consisted of pasture and row crops during the period of its use by the Haskell Institute. Therefore, the wetland and open water complex (known as Baker Wetlands), as it exists today, does not contribute to the "Farm" Property historic landscape.

***Reference*:** Appendix D.

Comment 18: *Inaccurate information – Traffic projections* (Comment ID Number – 224)

Response: The traffic data shown in the EIS for Haskell Avenue and Louisiana Street included forecast traffic volumes from 27th Street to 31st Street only. KDOT has computed additional forecast traffic volumes for Haskell and Louisiana from 31st Street to the Wakarusa River, for the No-Build Scenario, the 32nd Street B Alternative, and the 42nd Street A Alternative. The forecast traffic volumes were derived from the same travel demand model as that used for the EIS (1998 Lawrence –Douglas County QRS II model). These additional forecast traffic volumes can be found in Appendix F. The results indicate that the year 2025 vehicle traffic per day for Haskell and Louisiana would be more with the 42nd A scenario than with the 32nd B scenario.

***Reference*:** Appendix F

Comment 19: *Inaccurate and inadequate information – Noise impacts of 32nd Street B Alternative and 42nd Street A Alternative.* (Comment ID Numbers – 224, 227, 228)

Response: A traffic noise study consists of the identification of land use, measurement of existing noise levels, prediction of future design year noise levels and identification of traffic noise impacts to sensitive receivers adjacent to the project. If traffic noise impacts are identified, noise abatement measures (mitigation) are evaluated.

The FHWA has determined the noise abatement criteria (NAC) for different land uses classified according to human activities that occur within the property boundaries. Following are the land use categories and examples of each category.

Land Use Category	Noise Abatement Criteria	Description of Land Use Category
A	57dBA	Land on which serenity and quiet are of extraordinary significance.
B	67 dBA	Residences, parks, etc.
C	72 dBA	Developed lands
D	No NAC	Undeveloped lands
E	52 dBA (Interior)	Residences

Traffic noise impacts occur when the predicted noise levels approach or exceed the NAC or when predicted (2025) traffic noise levels substantially (greater than a 10 dB increase) exceed the existing noise level. KDOT's "Policy Statement on Highway Noise Abatement" defines the "approached" value as 1 dBA less than the NAC.

The NAC does not define a permissible level of noise. It should not be viewed as a federal standard of a desirable noise level. The NAC defines the noise level at which noise abatement must be evaluated and considered for each land use category.

If an impact is identified, noise abatement measures must be considered. Noise abatement measures include the modeling of noise walls to reduce noise impacts adjacent to the project. The NAC also is not a design goal for noise abatement. Noise abatement measures must provide at least a 5 dBA insertion loss to provide substantial reduction in noise. For example a barrier protecting a residence with a 69 dBA noise level should not be designed to mitigate to the NAC of 67dBA. Conversely, the same residence with an existing noise level of 82 dBA can not expect a noise barrier to provide a 15 dBA insertion loss. The design of such a barrier would not be reasonable or feasible. There is no requirement to construct noise walls. It is the project sponsor's decision whether the implementation of abatement measures is reasonable and feasible.

The 42nd Street A alignment would not have noise impacts on the undeveloped land, but rather on certain sensitive receivers (residences) within that undeveloped area. Undeveloped lands (Land Use Category D) have no Noise Abatement Criteria (NAC), and noise abatement analysis is not required for this land use. Although there are few residences along the 42nd Street A alignment, noise impacts would occur to those sensitive receivers that would experience noise levels that approach or exceed the NAC or experience traffic noise levels that substantially exceed the existing noise levels. If a sensitive receiver is impacted, noise abatement analysis is required in accordance with C.F.R. 772.11 (c). The 42nd Street A alignment would not have direct noise impacts to the Haskell Agricultural Farm Property (HAFP), however, the future traffic noise generated by expansion of adjacent Haskell Avenue, Louisiana Street, and 31st Street will increase from existing conditions (see additional text below).

The 32nd Street B alignment would have significant noise impacts on the HAFP without walls, as noted in section D.3.f. – Noise Impacts, where it states *"The 32nd Street Alignment B Alternative was modeled for noise levels with and without noise walls. Without noise walls there would be a significant impact on adjacent noise-sensitive areas (HINU south campus, Baker Wetlands)"*. If there had been no impact, abatement analysis would not have been considered.

To reiterate, the 57 dBA (Category A) is not a permissible sound level, but rather it is the NAC, which if approached or exceeded triggers noise abatement analysis. In addition, these noise levels are EXISTING noise levels. That is, this is what the area is experiencing at the present time without the construction of the 32nd Street B alternative. Also, as stated above, the 4(f)

clearly states that the 32nd Street B alternative would create a significant impact on the Haskell Farm area without the construction of noise walls.

Section E. – Avoidance Alternatives, discusses, in general, where the 42nd Street A alternative-related noise will come from. As stated in the Draft 4(f) "*However, due to noise mitigation features (of the 32nd Street B alternative), which include 12-foot-high noise walls and relocation of Louisiana Street and Haskell Avenue, the total audible disturbance associated with this alternative will be less by the year 2025 (ending year for local land use planning) than noise disturbances associated with the No-Action or 42nd Street alternatives*". The noise impacts of the No-Action and 42nd Street alternatives would be secondary in nature, as they would come from traffic on Haskell Avenue, Louisiana Street, and 31st Street. To explain further, this means that when future development south of the Wakarusa River occurs, traffic on Haskell Avenue and Louisiana Streets will increase, as these are the primary north/south routes from Lawrence to the areas south of the river (see traffic data in Appendix F). To accommodate this traffic, these streets will most likely require expansion from two lanes to four lanes, and the noise generated from the traffic of Haskell Avenue, Louisiana Street, and 31st Street in their existing locations would have a greater effect on the HAFP than would the noise from the 32nd Street B alternative with noise walls and the relocation of those streets (see Sound Level Contour exhibit in Appendix F). In the No-Action and 42nd Street alternatives, there is no provision for relocation of those streets

The above information was formulated based on the November 6, 2002 Traffic Noise Analysis. In that study, the area greater than 56 dBA in the Baker Wetlands for the 32nd Street alignment is limited north of the roadway to approximately existing 31st Street due to the construction of noise walls adjacent to the 32nd Street alignment and the relocation of Louisiana and Haskell away from the wetland. The area greater than 56 dBA in the Baker Wetlands for the 42nd Street alignment includes a sliver along Louisiana and existing 31st Street, and a wider area along Haskell all the way to the river.

Comment 20: *Inadequate impact analysis – Omission of analysis for exhaust, oil, and vibration impacts.* (Comment ID Number – 227)

Response: These types of impacts were discussed in the Corps' Final EIS in Chapter 4 in sections 4.8 Air Quality, 4.16 Construction Impacts, and 4.24 Energy Impacts.

Comment 21: *Consider additional mitigation measures that benefit and involve HINU (management of Haskell wetlands and other mitigation amenities is not stated).*
(Comment ID Number – 185)

Response: Project impacts will occur in the Baker Wetlands, therefore, wetland mitigation measures are geared mostly toward those aspects of mitigation that deal with the Baker Wetlands complex and Baker University. If the project is built, there could be opportunities for the HINU community to become involved with the proposed Wetland/Cultural Education Center which could also be used to provide insight into the history of the area.

At this time it is anticipated that wetlands could be created on Haskell University property where 31st Street will be removed, if the HINU community so desires.

The proposed campsites, hike and bike trails, and parking areas will be maintained by Baker University, since these amenities will be located on the land that will become the responsibility of Baker University.

Measures to minimize harm include walls along the trafficway that will contain or minimize noise, roadway debris, light, and visual disturbances. In addition, roadway runoff will be routed to ditches outside of the Baker Wetlands to prevent potential contaminated runoff from entering the wetlands.

***Reference*:** Sections F.2 and 3.

Comment 22: *Inaccurate information – no mention of public use of wetlands for education.* (Comment ID Number – 218)

Response: Section B.1.f. (Function and Usage of the Baker Wetlands) of the 4(f) document states that Baker University "….has made the area accessible to the public". In addition, the Baker Wetlands history in Appendix A indicates that a boardwalk and informational kiosk were added in 1994. Although the text in the 4(f) document does not specifically explain public usage, FHWA and KDOT are aware that several elementary school students use the Baker Wetlands for educational purposes, and that the Jayhawk Audubon Society sponsors field days and provides transportation and volunteers for elementary schools that have experienced reductions in financial support for field trips.

***Reference*:** Section B.1.f.

Comment 23: *Mitigation for 42nd Street A Alternative secondary impacts is ignored and should be similar to mitigation for 32nd Street B Alternative.* (Comment ID Number – 224)

Response: It is not the policy of FHWA to mitigate for secondary impacts. As part of the 32nd Street B alignment, Haskell Avenue and Louisiana Street will be relocated, moving them away from the HAFP/Baker Wetlands. Although this will minimize the secondary impacts that traffic noise and potential development would have on the Baker Wetlands, the primary purpose of the street relocation is to gain contiguous land for mitigation of direct wetland impacts, not for mitigation of secondary impacts.

Comment 24: *Consideration of an eastern by-pass.* (Comment ID Number – 175)

Response: The Eastern By-pass has been considered over the years by KDOT, FHWA and the Corps of Engineers. Each time the agencies felt it did not meet the Purpose and Need of the Project. Further, the Corps said that," this corridor would require extensive bridging of the large floodplain and floodway of the Kansas River". This would translate into excessive cost and environmental impacts.

I. Conclusions

The following text provides a discussion for concluding that there are no feasible and prudent alternatives to the 32nd Street Alignment B (Preferred Alternative) use of the Section 4(f) resource (the Haskell Agricultural Farm Property). The 42nd Street Alignment A avoids direct impacts on the Haskell Farm Property and is considered the Avoidance Alternative. The following information presents an accumulation of factors that collectively, rather than individually, have adverse impacts that present unique problems with the Avoidance Alternative

1. THE PREFERRED ALTERNATIVE BEST MEETS THE PURPOSE AND NEED

The K-10 Highway connecting link within the city of Lawrence is located on US-59 and 23rd Street and is heavily congested due to high traffic volumes, poor access management and insufficient capacity. These deficiencies degrade the performance of the regional transportation system and contribute to unsafe, congested and inefficient conditions both in the regional system as well as on Lawrence city streets serving local traffic needs. Therefore, the purpose and need for the proposed project is to provide a safe, efficient, environmentally sound and cost-effective transportation facility for users of K-10 Highway and the surrounding state highway system and, to the extent possible, to alleviate congestion on Lawrence city streets.

The No-Action Alternative fails to satisfy the purpose and need for the project and is therefore not considered a prudent alternative. Although the Preferred Alternative and the Avoidance Alternative meet the purpose and need for the project, the Preferred Alternative would divert more traffic from local streets, thereby improving safety on the local street network. Safety improvements are measured in terms of reductions in accidents. Based on the measure of accident reductions, the Preferred Alternative will result in 240 fewer accidents than the Avoidance Alternative by the year 2025, and will therefore result in a cost savings of approximately $6 million more than for the Avoidance Alternative (see Table 3).

Table 3 – Accident Analysis

	No-Action Alternative	Preferred Alternative (32nd Street B)	Avoidance Alternative (42nd Street A)
Average Annual Change in Accidents (2005-2025)	0	- 120	- 108
Total Change in Accidents (2005-2025)	0	-2400	-2160
Total Savings (year 2001 dollars in millions)	0	- $59.9	- $53.9

Source – Corps of Engineers Final EIS, December 2002.

The Preferred Alternative will carry as many as 3,634 more cars per day (approximately seven percent more) than the Avoidance Alternative by the year 2025 (see Table 4). The Preferred Alternative will be more efficient and cost-effective by being a more direct route between the project termini. The Avoidance Alternative is almost one mile longer than the Preferred Alternative.

Table 4 – Forecast Traffic on SLT for Year 2025

	No-Action Alternative	Preferred Alternative (32nd Street B)	Avoidance Alternative (42nd Street A)
Maximum Average Daily Traffic	0	55,566	51,932

Source – Corps of Engineers Final EIS, December 2002.

2. THE AVOIDANCE ALTERNATIVE COSTS MORE THAN THE PREFERRED ALTERNATIVE

The latest cost estimates (Table 5), which were based on revised year-2007 prices, indicate that the Avoidance Alternative would cost approximately $19 million more than the Preferred Alternative.

Table 5 – 2007 Cost Estimate

Cost Item (Dollars in Millions)	Preferred Alternative (32B)	Avoidance Alternative (42A)
Mitigation	22.1	2.0
Road Construction	56.2	43.4
Bridge Construction	35.9	82.6
Utility Relocation	0.8	0.6
Preliminary Engineering	11.4	12.8
Construction Engineering	9.1	10.2
Right of Way & Displacement	12.4	15.3
Total Project	**147.9**	**166.9**
Operation and Maintenance	0.213	0.246

The Preferred Alternative has higher roadway costs of $56.2 million versus $43.4 million for the Avoidance Alternative because of special construction in the wetlands. The mitigation costs are also higher for the Preferred Alternative at $22.1 million versus $2.0 million due to direct impacts to the wetlands. The overall costs of the Preferred Alternative are less due to the difference in bridge construction costs. The bridge costs for the Preferred Alternative being $35.9 million and those for the Avoidance Alternative being $82.6 million due to the difference in linear feet of construction of 5,005 linear feet and 9,215 linear feet respectively.

3. THE AVOIDANCE ALTERNATIVE HAS GREATER IMPACTS ON THE WAKARUSA FLOODPLAIN AND FLOODWAY

Although both alternatives would result in floodplain impacts, the Preferred Alternative is located on the edge of the floodplain. It will have lesser impacts on the floodplain than the Avoidance Alternative, and will have no impacts on the floodway. As shown on Exhibits 4f-8 and 4f-9, and as explained in the text below, floodplain impacts would be more severe with the Avoidance Alternative than with the Preferred Alternative.

The Avoidance Alternative alignment would pass through approximately 2.4 miles of floodplain, which includes 2.3 miles of the Wakarusa River floodplain and 0.1 mile of a tributary floodplain. Within the Wakarusa floodplain, the Avoidance Alternative alignment would cross the Wakarusa River floodway in three places, totaling approximately 0.8 mile, thereby requiring three bridges at these crossings. According to the Corps of Engineer's Record of Decision, the Avoidance Alternative "will have a significantly greater impact on the river and its riparian corridor".

In contrast, the Preferred Alternative alignment will be routed along the northern edge of the Wakarusa River floodplain. Approximately two miles of the alignment is within the floodplain. This alignment does not cross the Wakarusa River and avoids impacts to the Wakarusa River floodway.

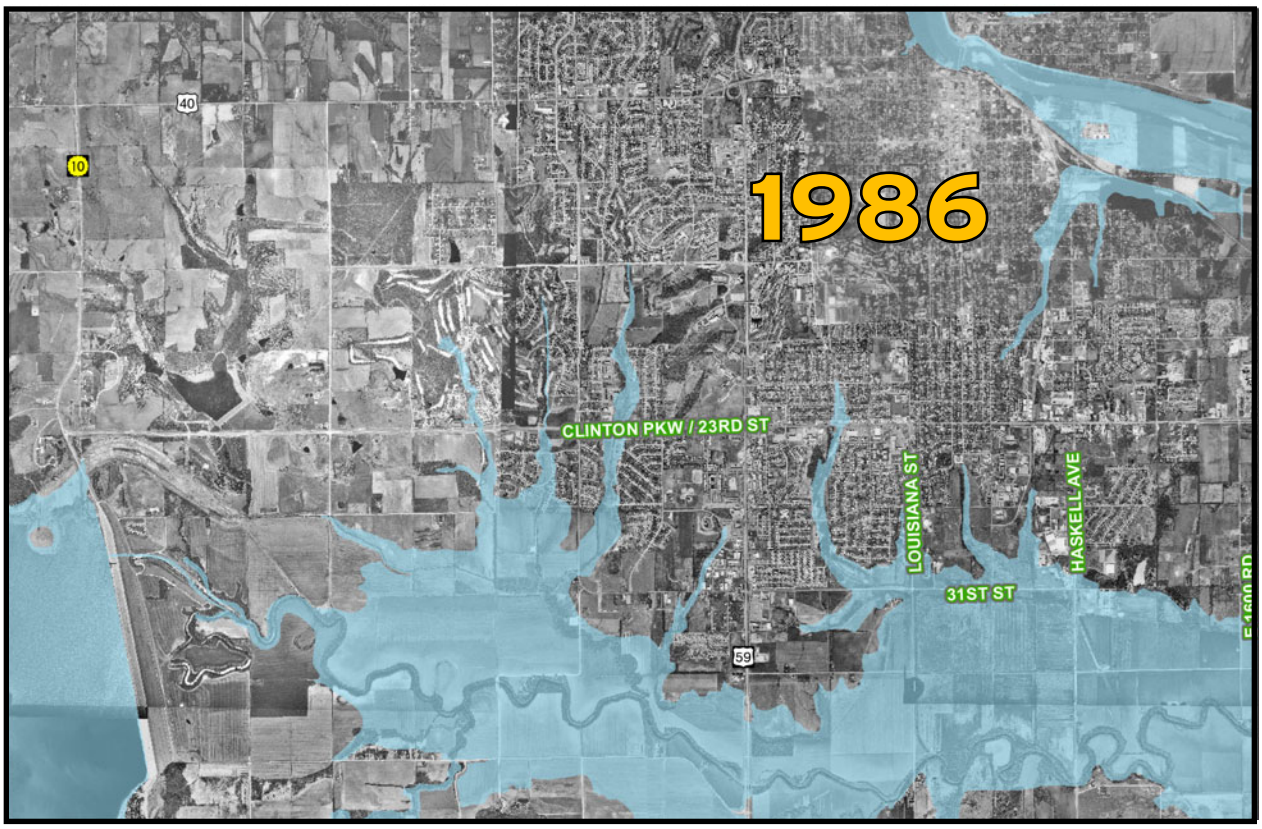
4. THE AVOIDANCE ALTERNATIVE WOULD ACCELERATE PLANNED AND UNPLANNED DEVELOPMENT SOUTH OF THE WAKARUSA RIVER

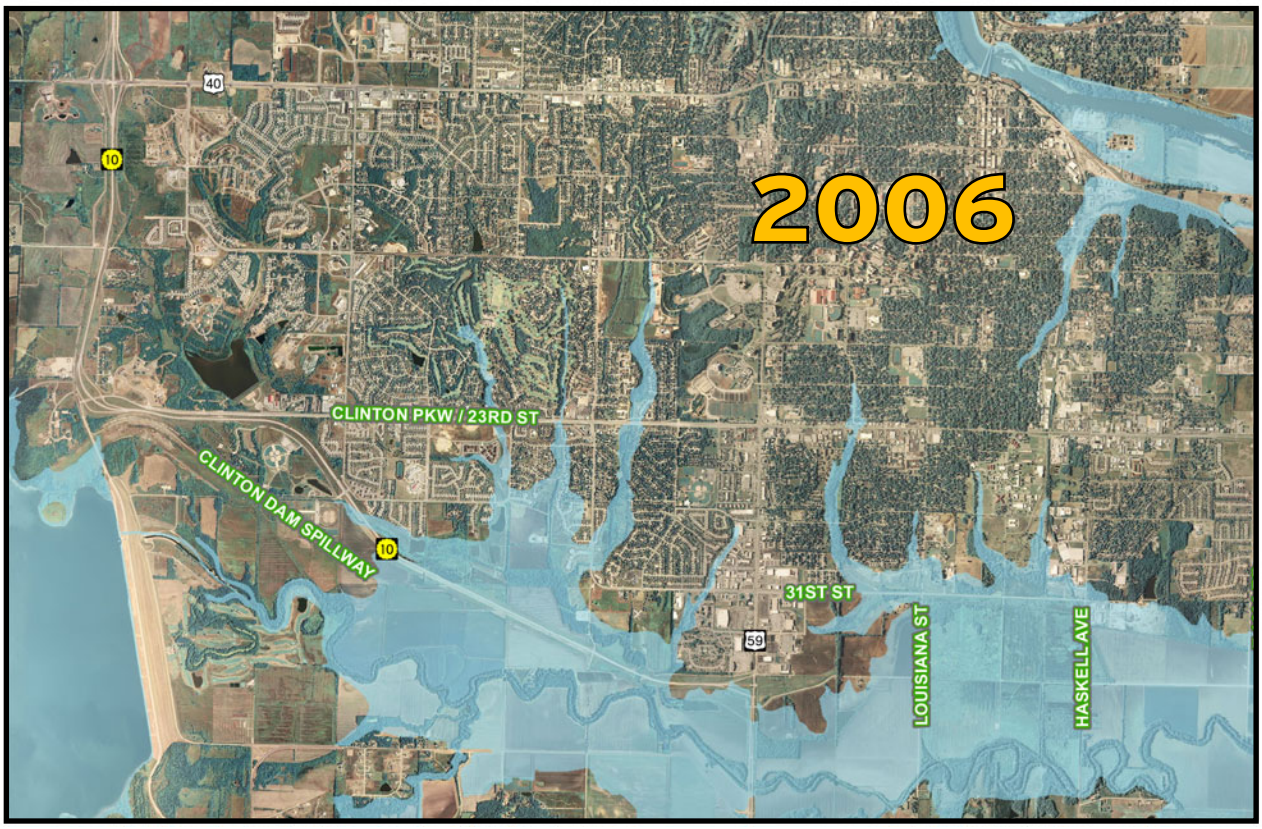
The Avoidance Alternative would greatly increase the accessibility of the area south of the Wakarusa River, and it is anticipated that this alternative would add an increase in development

pressure for both residential and commercial uses. As indicated by the future land use map and designation of growth/service areas, Lawrence anticipates that its growth areas will be to the south and the west. *Horizon 2020*, the City's comprehensive land use plan, currently places the area impacted by the Avoidance Alternative in the Urban Growth Area (UGA) to the south of the City. The UGA boundary was extended south of the Wakarusa River with an amendment that was adopted in January, 2004. This amendment to Horizon 2020 extends the UGA south to a point between North 1000 Road and North 900 Road. In addition, the *Comprehensive Transportation 2025 Plan* is being revised and updated for 2030.

As indicated by the Horizon *2020* plan amendment, *Transportation 2025*, and the preliminary *Transportation 2030* study, all of which include the addition of the area south of the Wakarusa River in the UGA, the City is planning ahead for future development in that area. The Avoidance Alternative would provide the access needed to induce and accelerate that growth. According to the Transportation Research Board, in a report titled Land Use Impacts of Transportation: A Guidebook, transportation projects can "…*cause some households or business to locate in the study area instead of in other places in the region or other regions. If access is improved to land on the urban fringe that is otherwise ready for development, developers may capitalize on the improved access and build homes in these areas instead of elsewhere in the region".*[5] This is evidenced by the new residential areas that are currently being developed near the existing western leg of the SLT, which is located along the west edge of the city limits and within an Urban Growth Area (see Exhibit 4f-13). A Transportation Research Board report titled NCHRP Report 466: Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects, stated that "*transportation improvements often reduce the time-cost of travel, enhancing the attractiveness of surrounding land to developers and consumers…. If the conditions for development are generally favorable in a region, that is, the region is undergoing urbanization, highway… projects can become one of the major factors that influence where development will occur…(and)…the general tendency is toward relatively high-density commercial or multifamily residential development near facility nodes in urban and suburban areas, and single-family residential development in the urban fringe".*[6] The Avoidance Alternative would also likely create infrastructure demand for streets, sewer, water and other public utilities south of the Wakarusa River by providing an interchange that will enhance access. This would likely put a financial burden on the City and County to build this infrastructure more quickly and in greater capacity than anticipated. According to the Douglas County Administration office, "the impact of a southern alignment of the SLT, such as the 42B Alternative Alignment, would cause the assumptions, locations, and number of major commercial centers to be reconsidered based on development pressures that would be associated with the creation of a major intersection in an area where all four corners of the intersection could be developed" (see Douglas County letter in Appendix G, response to Question 1). In addition, the Douglas County Administration stated that a new major intersection in conjunction with an alignment south of the river, "..could provide a new or alternative location for the next regional commercial node" and that "commercial nodes are attractions for other types of land uses, including residential uses, and the likely result of a commercial node at Haskell Avenue would be a more mixed and dense urban population than the low density residential proposed on the *Transportation 2030* land use map" (see Douglas County letter in Appendix G, response to Question 3).

[5] Parsons Brinkerhoff Quade & Douglas, Inc. *Land Use Impacts of Transportation: A Guidebook.* National Cooperative Highway Research Program, Transportation Research Board, October 1998.
[6] Louis Berger Group, Inc. *NCHRP Report 466: Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects.* National Cooperative Highway Research Program, Transportation Research Board, 2002.





0 4,000 8,000 Feet

100 Year Floodplain

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

EXHIBIT 4f-13
Growth Near West Leg of SLT

The City is currently planning the development of a wastewater treatment facility south of the Wakarusa River. The first phase will serve western sections of Lawrence and will in later years be a means to treat sewage due to population growth south of the river. The Avoidance Alternative could require expansion of wastewater plant capacity sooner than anticipated.

Moreover, the projected growth that would occur south of the river around the Avoidance Alternative would result in more traffic on Haskell Avenue and Louisiana Street, and would in turn result in widening these streets adjacent to the HAFP. This impact is discussed in the following Section 5.

The Preferred Alternative will have a somewhat limited impact on future development. The greatest potential for development pressure will occur at the interchanges between the alignment and local arterial streets. Such pressure may include requests for approval of commercial development along Haskell Avenue and replacement of the existing industrial site at the intersection of Haskell Avenue and 31st Street. Land located within the 100-year floodplain is not recommended for urban development, but may be approved if the development complies with the local floodplain regulations.

The Preferred Alternative is generally consistent with the goals set forth in *Transportation 2025*, the preliminary *Transportation 2030* study, the amended *Horizon 2020 Plan*, and the *South Lawrence Trafficway Corridor Land Use Plan.* According to the Douglas County Administration, the preliminary *Transportation 2030* plan took into consideration the Preferred Alternative and its related issues (see Douglas County letter in Appendix G, response to Question 1). The City's *Southern Development Plan* that was adopted in 1994 (the study area is between 31st Street and the Wakarusa River) is currently undergoing revision and includes the Preferred Alternative alignment of the SLT in its future land use plan. The Avoidance Alternative alignment is not consistent with those documents and major modifications would be required to incorporate the Avoidance Alternative alignment into the overall plan. In addition, amendments may need to be made regarding the types of development that will be acceptable in the vicinity of the roadway corridor. Updates may need to be made regarding specific land uses, zoning classifications and references to existing plans.

5. THE AVOIDANCE ALTERNATIVE HAS GREATER SECONDARY AND CUMULATIVE IMPACTS THAN THE PREFERRED ALTERNATIVE

Although the Avoidance Alternative would have no direct impacts to the Haskell Agricultural Farm Property (HAFP), it would result in greater long-term secondary and cumulative adverse impacts to the HAFP than the Preferred Alternative.

The traffic on Haskell Avenue, 31st and Louisiana Streets is going to increase regardless of which alternative is constructed (see table below). The traffic on Louisiana will only increase slightly if the Preferred or Avoidance Alternative is selected. The traffic on Haskell Avenue however will see a substantial increase (4,200 vehicles per day) if the Avoidance Alternative is selected over the Preferred Alternative. The Avoidance Alternative is expected to accelerate development south of the Wakarusa River, which will increase traffic on both Haskell Avenue and Louisiana Street since both roads provide primary north/south routes into Lawrence (see traffic data in table below and in Appendix F). The Douglas County Administration office has also stated that "those involved in the development of … future planning documents agree that the cumulative impacts … in the short horizon time of 5-10 years is significant…" (see Douglas County letter in Appendix G, response to Question 1).

The impacts from traffic to the HAFP would be much greater with the Avoidance Alternative because of the substantial increase in traffic on Haskell Avenue and Louisiana Street, and

because these streets will not be relocated to the East and West of the property as in the Preferred Alternative. Moving 31st Street south of the dike and adjacent to the Preferred Alternative would reduce negative effects from the increase in traffic on this route to the south Haskell campus. Additionally, because of the increases in traffic, Haskell and Louisiana Streets may need to be widened to four lanes, and under the Avoidance Alternative, this widening would occur adjacent to the HAFP.

Table 6 – Projected Traffic Increase

Location	Year	No-Build	Preferred Alternative 32 B	Avoidance Alternative 42 A
31st Street Louisiana to Haskell	1998	12800	7900	6600
	2025	25900	19500	19600
Louisiana 31st to Wakarusa River	1998	800	1000	700
	2025	14400	15900	16000
Haskell 31st Street North to 27th	1998	14800	10900	10100
	2025	35500	27900	24400
Haskell 31st to Wakarusa River *	1998	3000	2200	5100
	2025	15200	16700	20900

* For the Preferred Alternative this traffic is South of SLT to Wakarusa River

Based on the City's future land use plans, a review of development trends, and Corps discussions with local planning authorities (during preparation of the EIS), it was determined that urban development will occur within the foreseeable future on some of the undeveloped land located in the vicinity of the HAFP. A portion of the land located immediately west of Baker Wetlands was platted for multi-family development. The land was purchased by KDOT after it had been platted, and was intended to be utilized for right-of-way and mitigation (associated with the Preferred Alternative). This land will most likely be returned to private ownership and may be subject to urban development if the Preferred Alternative is not constructed (see Douglas County letter in Appendix G, response to Question 5).

Although the land adjacent to the Baker Wetlands is located within the 100-year floodplain, and although urban development in the floodplain is not recommended, development may be approved if it complies with the local floodplain regulations. The Douglas County Administration stated that "development west and northwest of Louisiana Street would likely be residential with significant areas retained for drainage easements along FEMA floodplains. The industrial and non-residential nature of land uses to the east of Haskell Avenue would not be likely to change, although over time some redevelopment of existing or similar types of uses would probably occur" (see Douglas County letter in Appendix G, response to Question 6). Development in this area would diminish or eliminate the rural character of the land in the vicinity of the HAFP. Urban development, along with associated increases in traffic, will lead to significant increases in noise, light, urban debris, and visual disturbances in and around the HAFP. Since the Avoidance Alternative would have no direct impacts to the HAFP or the Baker Wetlands, there would be no mitigation measures implemented. As such, the Avoidance Alternative would not provide additional protection from future adjacent development and its associated traffic in the vicinity of the HAFP.

The Preferred Alternative was modeled for noise levels with and without noise walls. Without the noise walls, there would be a greater impact on the adjacent noise-sensitive areas (HINU south campus, Baker Wetlands). However, due to noise mitigation features, which include 12' high noise walls and relocation of Louisiana Street and Haskell Avenue, the total audible

disturbance associated with this alternative will be less by the year 2025 (ending year for local land use planning) than noise disturbances from adjacent roads associated with the Avoidance Alternative. (See Appendix F, which shows the noise contours for both the HINU Campus and the Baker Wetlands. Contours are shown for both the Preferred and Avoidance Alternatives.)

With the Preferred Alternative, visual impacts may occur as a result of walls being constructed for the purpose of noise mitigation. Although the east/west dike and trees located on the northern edge of the Baker Wetlands will screen the wall and relocated 31st Street from the HINU south campus, relocated 31st Street and the north (12-foot) wall will still be visible from the south side of the east/west dike until the evergreen tree plantings used for screening grow to sufficient height. The south noise wall will be six feet high on a 6-foot earthen berm that will be planted with vegetation for screening. This south wall will be visible from the Baker Wetlands south of that berm until the vegetation grows to near the height of the wall. Therefore, the visual impact of the walls on the wetlands will be temporary, as it will be minimized with vegetative screening. Changes to the current views within the HAFP will be most dramatic close to the roadway, with diminishing viewshed impacts as one moves farther north or south of the road.

6. THE AVOIDANCE ALTERNATIVE HAS ADDITIONAL ADVERSE ENVIRONMENTAL IMPACTS OVER THE PREFERRED ALTERNATIVE

Other environmental factors that were evaluated to determine the most feasible and prudent alternative are discussed below.

a. Riparian Woodland

The Avoidance Alternative would impact 5.2 acres of riparian woodlands and 18.2 acres of upland woods. In comparison, the Preferred Alternative will impact 1.2 acres of riparian woodlands and 9.6 acres of upland woods.

b. Other Historic Sites

The Avoidance Alternative would be aligned along the area where the Oregon and California National Historic Trail was located, including Blanton's (Bridge) Crossing located at the Wakarusa River and Louisiana Street, east of the Meair's Farmstead. The Blanton's Crossing area is a "High Potential Site" identified by the National Park Service (NPS) trail management plan as part of the Oregon and California National Historic Trail, which traveled along the area where the east/west portion of the Avoidance Alternative alignment is located. The NPS urges protection of this high potential site as an important trail resource, and to recognize the historic importance of this area in the history of western migration and of "Bleeding Kansas". The Avoidance Alternative would impact a corner of the property of the National Register eligible Meair's Farmstead, located adjacent to the alignment. However, there would be no adverse effect with the implementation of vegetative screening.

The Preferred Alternative will avoid the Meair's Farmstead and the area south of the Wakarusa River that is of historic importance in the history of Kansas.

7. THE PREFERRED ALTERNATIVE PROVIDES A NET BENEFIT TO THE SECTION 4(F) PROPERTY

There are currently multiple transportation uses within the boundaries of the HAFP. The existing 31st Street crosses the southern boundary of the Haskell University Campus; and multiple maintenance roads, that are accessible by locked gate access, bisect the Baker Wetlands complex. Also, there are two small access parking areas, one south of 31st Street approximately ½ mile east of Louisiana Street and on the west of Haskell Avenue at 35th Street.

A new transportation corridor would not be created through the HAFP with the 32 Street Alignment B alternative. It would require an additional 40 acres of the HAFP to be used for transportation (53 acres for the new alignment minus the 13 acres vacated by the relocation of 31st Street). This corridor would be consistent with the transportation uses that exist currently in HAFP. Also, the relocation of 31st Street will make the Haskell Campus contiguous, and restoration will be consistent with the current uses of the HAFP. In comparison, the total land area of the HAFP is 804 acres. The 32nd Street Alignment B alternative requires approximately 5% of that area.

The Preferred Alternative (32nd Street B), with mitigation measures as stated in the MOA would provide the following net benefits to the Section 4(f) Property:

- Removal of 31st Street from HINU property and conversion of that area to wetlands, if so desired by HINU. 31st Street will be relocated to the south, off of HINU property.
- Relocation of Haskell Avenue and Louisiana Street to obtain areas for wetland mitigation adjacent to the Baker Wetlands, between the relocated and vacated roads. Approximately 304 acres of mitigation wetland restoration (at a 6:1 ratio) will be developed in these areas, plus 13 acres on HINU property after relocation of 31st Street, resulting in a net gain of approximately 259 acres of wetlands. This mitigation proposal will create a permanent buffer along the east and west sides of the southern half of the HAFP (Baker Wetlands) and will protect the property from noise, light, urban debris and visual disturbance, and will also reduce foreseeable cumulative future development-related impacts. (Under the Avoidance Alternative, this net benefit would not be provided.)

KDOT also worked closely with Baker University representatives to develop mitigation measures for the Preferred Alternative directed at addressing impacts to wetlands, resulting in the following additional net benefits to the Section 4(f) Property:

- Development of a 10,000 square foot Wetland and Cultural Educational Center which will highlight the history of the Baker Wetlands in relation to the HAFP.
- Funds for an annuity will be provided to Baker University for maintenance, operation and administration of the expanded Baker Wetlands complex and the Educational Center. The endowment is expected to ensure that sufficient funding will be available to maintain Baker Wetlands indefinitely.
- Construction of hike and bike trails to provide enhanced access to Baker Wetlands.
- Construction of small parking areas to enhance access to the Baker Wetlands.
- Development of campsites in the mitigation area.
- Provide pedestrian access to Baker Wetlands from Broken Arrow Park and from the southeast corner of the HINU campus.

As stated by the Keeper of the National Register *"The former agricultural farm property (Upper Fields and Baker Wetlands) is important because it reflects the essential role of agricultural training in the early history of the Haskell School and the diverse historic uses of the lands to the south of the core campus. While modified, these former agricultural lands still retain the essential physical characteristics associated with this area from the historic period, including land use patterns, spatial organization, circulation networks, and small scale elements such as the various water control systems and structures."* While the Preferred Alternative uses part of

the land within the boundaries of the HAFP it does not affect any of these remaining physical characteristics that contribute to the eligibility of the property for the National Register. In addition, by relocating 31st Street adjacent to the Preferred Alternative there would continue to be only one transportation corridor bisecting the HAFP. However, it will make the Haskell Indian Nations University property a contiguous unit.

The Corps of Engineers concluded that the Preferred Alternative "is unlikely to significantly impact religious/spiritual use of the property by Native Americans and that the property's value to Native Americans, as a reminder of the past, will not be substantially degraded.

8. CONCLUSION STATEMENT

The above information is an accumulation of factors that collectively rather than individually have adverse impacts that present unique problems with the Avoidance Alternative.

Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the Haskell Agricultural Farm Property (HAFP), and the proposed action includes all possible planning to minimize harm to the HAFP resulting from such use.

APPENDIX A
Baker Wetlands History

Baker University Wetlands
History Since 1968

By Dr. Roger L. Boyd
Biology Department – Baker University

INTRODUCTION

In the fall of 1968, Baker University received 573 acres from the Department of Health, Education, and Welfare. The property was received through a "Quit Claim" Deed which required that the property be utilized for the following specific purposes outlined in the university proposal submitted to HEW:

- Education
- Research
- Restoration of the farm ground to native habitat

The University submitted annual progress reports to the U.S. Real Property Office for 30 years. At the end of this period the University received a clear title to the property.

SUMMARY

Condition in 1968

The area was surrounded by a levee on four sides with a drainage canal (Mink Creek) in the center of the eastern half. Mink Creek was designed to drain to the south to the river. There were two virgin wetland meadows of about 15 and 35 acres. The northwest quarter was pasture and the rest of the area had been cultivated at some point in the past and W-ditched for increased surface drainage. There was a subterranean tile system that drained to the river in the western section of the eastern half. For the most part, the area was fairly dry. The drainage systems were not properly maintained and during wet periods the system was easily over-taxed, causing flooding, significant at times, on the inside of the levee system.

What was Broken

The western levee was low and had several breeches in the northern half of the levee. The northern levee had 6 culverts. Five of them were eroded out and no longer held water out, but let significant amounts of water in. The sixth culvert was partly silted shut. Mink Creek had a screw value structure at the north end, another structure on 35th Street and large culverts that exited into the river. The northern structure was silted close, the 35th Street structure was dilapidated and non-functional, and the outlet was partially silted shut with the outside flappers all non-functional. There were five surface tile systems that drained into Mink Creek and all five had been severely eroded. The south central location of the area had developed into a large local dump site and contained considerable amounts of refuse along with several pieces of abandoned heavy equipment.

What has Changed

The land that was being cultivated prior to receiving the land was kept in cultivation until it could be planted into native grasses and forbs. A majority of the land was replanted by 1982, the remainder in 1991-2. The dump refuse was bulldozed over the levee, but not into the river, and the heavy equipment was disposed of. The flood canal along Louisiana Street and 31st Street were built in 1971. During the same year 35th Street was closed. Beginning in 1991 several significant sources of income (mostly USF&W) were acquired. A number of significant projects have been conducted since that time:

- The northern half of the center road was elevated using fill from a borrow ditch created to the east.

- Three water control structures (WCS) were placed under this road.
- The five eroded culverts on the north levee and four of the breaks along Mink Creek were all plugged.
- Two pools of water were created to the south of 35th Street using levee construction and Water Control Structures (WCS).
- A southern section of the subterranean tile system was excavated and plugged.
- The northern structure on Mink Creek was plugged, the structure at 35th Street was removed (except for the screw posts), and the outlet culverts were plugged. A new WCS was installed on top of the outlet tubes and 3other WCS were installed.
- 35 wood duck boxes were constructed and erected, as well as 10 bluebird house and a large nest box for barn owls.
- An 850' elevated boardwalk, information kiosk, two nesting islands, and wildlife observation blind were built.
- Long-term studies on biodiversity, specifically birds, small mammals, turtles, snakes, spiders, and plants were all initiated.
- A levee and 2 WCS were installed in the SE section in order to further hydrate this area to increase biodiversity.
- A majority of the scrap metal (barrels, buckets, refrigerators, washing machines, bed springs, car parts, roofing tin, agricultural storage bins, etc.) was removed from the dumpsite.
- A system of 27 observation wells was installed and measured monthly.
- The entire area has become wetter and hydric vegetation has increased phenomenally since 1968.
- The integrity and biodiversity of the native plots has been a priority and the other areas have been converting to similar vegetation types. The exception is the northeastern section. This has become permanently wet without human intervention or control and yet it adds an additional dimension to the habitat on the area.

DETAILED COMMENTS

Condition of the Property in 1968 and Subsequent Changes

I will divide the property into four quadrants to discuss the condition of each. This will be a largely qualitative assessment, rather than quantitative. Some data does exist and can be provided, if needed. My personal involvement has been that I was an undergraduate senior at Baker in 1968-69. My father managed the area until his accidental death on the area in March 1982. During this early period I was involved in many of the management aspects with my father. I became a faculty member at Baker in 1976 and became the director/manager of the area upon my father's death in 1982.

Northwest Quadrant ~ 155 acres

- ***Pasture:*** This area was all fenced for pasture. This was also evident due to the presence of a windmill and concrete water tank on the northern edge. This area had, however, been neglected for some time and substantial areas were dense patches of rough-leaved dogwood with significant numbers of small locust, hedge and elm trees. The herbaceous vegetation was dominated by smooth brome and Kentucky bluegrass. Except for several depressions, the area was fairly dry most of the year.

- ***North Levee Breaks:*** There were four large breaks in the north levee. Each of these breaks had originally been culverts that were to drain the pasture into the canal along the northern boundary. The culverts originally had flappers on the outside to prevent water from coming back into the area. Over time, the culverts had silted shut and were no longer functional. This allowed craters up to 60 ft. across to erode away. This allowed high water from the canal to flow into the area but it also flowed out again as water receded.
- ***Permanent Wetlands on West:*** The other significant feature was a permanent wetland that had developed along the west edge. There was a fairly shallow levee that paralleled Louisiana Street much like the levee currently along Haskell Avenue. Portions of this levee had eroded away sometime in the past, perhaps as a result of the 1951 flood, and this had created an avenue for water to enter the pasture. My recollection is that this area consisted of approximately 3-5 acres of open water surrounded by emergent vegetation e.g. cattails, arrowleaf, and buttonbush. To me, this was the only area that I would have categorized as wetlands on the entire site. The current flood canal was not constructed until 1971. Drainage was to the north, as it is along Haskell Avenue, through a fairly shallow ditch. These depressions were slightly lower to the inside of the levee and were not effectively drained by the Louisiana Street ditch.
- ***Changes that have occurred:***
  - **Louisiana Flood Canal:** This canal was constructed in 1970-71 by the Wakarusa Watershed District (headquarters in Overbrook) to drain runoff from Naismith Creek directly to the Wakarusa River, thereby avoiding the relatively non-functional northern canal. Baker negotiated that in exchange for the impact of this project on its property, the township road now referred to as 35th Street, be closed and the ROW abandoned. In return, 31st Street would be constructed along its present route. The large earthen levee along the flood canal was constructed at that time, thus completely eliminating the permanent wetlands mentioned above.
  - **Pasture:** This area was brush-hogged in 1973 and again in 1978. The fence was replaced in 1973 by electric fence and the area was grazed under lease until 1981. It was again brush-hogged in 1992 after the present N-S road was elevated.
  - **Road Elevation:** As a mitigation for the planned wetlands fill by Dunbar, Lawrence Ready Mix, and Snodgrass to the north and east, the north half of the center road was elevated and three water control structures (WCS) were placed in the road in fall 1991. The fill used to elevate the road was obtained by creating a borrow ditch on the east side of the road. The plan was to utilize the road to re-hydrate the northwest quadrate as well as improving access. In preparation for this re-hydration, base-line biodiversity data were collected on plants, birds, mammals, and reptiles. The vertebrate studies have continued on a periodic annual basis by Dr. Calvin Cink. The vegetation samples were taken by me in 1991, 1996, and again in 2001. The area has significantly increased in hydric vegetation since 1991.
  - **Boardwalk:** In 1992 the initial phase of construction was started. The boardwalk and kiosk were completed by spring 1994. In summer 1999 two swallow pools were constructed near the boardwalk.
  - **Utilities:** The electric line is essentially the same as in 1968. The natural gas pipline is currently owned by Williams Gas Co. (several changes of ownership since 1968). A line that parallels the center road was replaced in 1989. There was an outbuilding and above-ground valve structure located along this central road, about 250 yards south of the north gate that was removed in 1999.

Northeast Quadrat ~ 115 acres

- ***North-South Canal:*** This quadrate is divided into two parcels by a drainage canal constructed ~1920. The canal drains to the river to the south and has been referred to as "Mink Creek" for the past 10 years. At the north end was a massive screw-valve system with two screw-valves and steel/wooden doors ~56" square. In 1968 these doors were closed and partially silted shut but there was still some leakage through the doors into the northern canal whenever water was present in the N-S canal. There was a similar set of screw-values on the bridge located on 35th street. The doors were present but in disrepair and were missing several boards, thus they were non-functional in closing and holding water.
- ***Western Parcel ~ 75 acres:*** This area was severely "W-ditched" with the ditches running to the north. There was a single culvert structure in the north levee that had drained the surface water into the northern canal. The culvert was badly eroded and non-functional, similar to the northwest quadrat. In addition, there were two areas on the west side of Mink Creek where there were breeches in a low levee that parallels Mink Creek. This area had been used as a pasture. This was evident due to a concrete watering tank in the northwest corner. This pasture was open in the center, with a broken fence row of hedge, locust and elm along the east side of the N-S center row. There were also scattered cottonwoods, ash, locust, mulberry and hedge along both sides of Mink Creek. This area seemed fairly dry in the early years but most of the herbaceous vegetation was brome and no attempts were made to burn it early in management.
- ***Eastern Parcel ~ 40 acres:*** This area also includes an additional 20 acres to the north that is owned currently by the Kansas Department of Wildlife and Parks (KDWP) and another 20 acres even further north (adjacent to 31st Street) that is owned by the University of Kansas (KU). The northern canal and levee traverses through the KU property and a small sliver of the KDWP property before flowing under the county bridge on County 1055 (Haskell Avenue). In addition, there is a remnant of an old railroad bed running diagonally across the northeastern corner of the KU property. And finally, there is an additional gas line (26") that runs diagonally from the south central metering site and crossing under Haskell Avenue just north of the bridge. In 1968 the northern canal flowed freely to the east and essentially retained little or no water. I have no recollection of what occurred to the north as it was not part of the Baker Wetlands and it was relatively inaccessible due to the absence of 31st Street. To the south of the levee the area had been cultivated in the past. It had been "W-ditched" to drain to the east. This surface water then flowed north and exited through a makeshift culvert created from an old steam engine boiler with a dilapidated wooden flapper on the canal side. The culvert was partially silted in with the flapper open and partially missing. Therefore, during high water this area was subject to flooding from the canal, the same as the other northern parcels already discussed.
- ***Changes that have occurred:***
  - **Cultivation/Pasture:** The fence around the western portion of this quadrat was repaired and grazing was begun in 1970. Within several years cultivation was abandoned on most of the eastern portion, as it was not adequately drained any longer. This area was fenced and grazed beginning in 1973.
  - **Hydrology:** In 1991 the north-south road was elevated and the borrow ditch on the east side of the road was created. At the same time the broken culvert on the north levee was plugged as well as the two breeches along Mink Creek. The bridge over Mink Creek was completely removed except for the north retaining wall. The doors on the screw valve structures were removed and steel culverts replaced the old bridge. Also during that year several beavers moved into the area and built separate dams on both ends of the northern canal. This raised the water level and caused a large number of trees to be cut or die from flooding along the length of the levee as well as in the area north of the canal. The beavers also further plugged

the old culvert in KU's portion of the levee. This created the large area of open water in this area. Also in 1991, a subterranean drainage tile system was discovered. This tile started in the northern edge of the west section and ran south, nearly a mile to the river. The tile was excavated near the river in 1992 and 50' was plugged with clay. This went a long ways in increasing the hydrology of the north central area. In 1998 we raised the small levee paralleling Mink Creek and put in two WCS to better regulate water in this area and to better utilize this levee for a trail. In 1999 beavers built a dam on Mink Creek near the southern WCS. They backed water up high enough to make the northern WCS ineffective but at the same time they dramatically increased the hydrology in the entire northern half of the northeastern quadrat. The beavers also began constructing small dams from the ends of several W-ditches and tying them into the levee paralleling Haskell Ave. This further elevated the water levels.

- **Vegetation:** This area was brush- hogged twice in the 1970's for the benefit of grazing and part of it was mowed again in 1992. The east half had ten acres of native grass planted on the southern edge in 1978. This area has been periodically burned since 1979. The rest of it was determined to be too wet for the grass mix we were using. None of the west half was ever planted to native species but as it became wetter since 1990 native species of sedges, spikerush and grasses have re-established in this area. This portion was first burned in 1983 and periodically since. Prior to rehydration both of these areas became very brushy but increased hydrology has killed much of this woody vegetation.
- **Utilities:** The electric utilities are essentially the same as 1968. There is a cut-off valve along the major gas line that was replaced in the mid-1980's. From aerial photographs it appears that this gas line was replaced in the mid-1950's. The RWD #4 obtained an easement for locating a water line parallel to Haskell Avenue in 1975 and the City of Baldwin did the same in 1979. The County rebuilt the bridge along Haskell Ave in 1982 and rerouted a significant portion of the levee and shoulder.

Southeast Quadrat ~ 148 acres

- ***North-South Canal:*** This quadrate is divided into two parcels by the same drainage canal as th northeast quadrat. The canal drains to the river to the south and is about 20 feet deep where it goes through the river bank levee. There were three culverts, each 52" in diameter that went through the levee and each had a very heavy steel flapper valve on the outside of the levee. In 1968 these culverts were partly silted shut, one of the flappers was missing, and the other were silted into an open position. In 1968 most of this area was cultivated except for 15 acres of virgin wetland prairie in the northeast corner. All of this was fairly dry but the farmer still had trouble working the ground at just the right time or being able to harvest the crop if it was a wet fall.
- ***Western Parcel ~ 77 acres:*** This area was "W-ditched" with the ditches running to the north and emptying into a big ditch. From there the water ran to the east and emptied into Mink Creek. There is a levee on the west side of Mink Creek which was created with the spoil from digging the canal. This levee had two large clay tile culverts that had originally gone through the levee in order to drain the surface water from the west field. Both of these had been eroded out of the levee and the tile sections were scattered in the canal and in the large erosion holes. In 1968 there was an old beaver dam just down stream from the southernmost culvert. This dam still retained water but was not high enough to prevent the fields from draining.
- ***Eastern Parcel ~ 71 acres:*** This area contains the 15 acre virgin wetland prairie tract at the north end. To the south were two 20 acre fields. The northern field was "W-ditched" and drained to the east. From there it drained north into a ditch and then back west into Mink Creek. The southern field was lightly "W-ditched" and drained north to a shallow ditch that drained west into

Mink Creek. The concrete retaining walls for this culvert had collapsed and the culvert was nearly silted shut but it still functioned except during extremely heavy run-off. All three of these areas were fairly dry in the early periods except for a shallow depression in the center of the southern field. The two fields were fairly consistently planted and harvested but in wet years this central depression was avoided.

- ***Changes that have occurred:***
  - **Cultivation:** None of this ground was cultivated after 1981.
  - **Hydrology:** In 1992 both ditches on the north edge were converted to WCS to regulate flow into Mink Creek. There was a nesting island created in the western parcel and the two culvert washouts were plugged and the levee reconstructed. Also there was a diagonal levee built that paralleled the gas line in the west. Also in 1992 the subterranean tile system in the western parcel was excavated and plugged. In 1994 there was a large WCS constructed on top of the old culverts at the south end of Mink Creek. The old culverts were plugged on the north end. This has not been a permanent plug and repairs will be made on the structure during 2002. On the eastern half there was a levee constructed on the south edge of the native meadow in 1995 and five depressions were excavated from several of the W-ditches. There was a WCS placed at the east end of this levee and the collapsed culvert in the southern field was replaced with another WCS.
  - **Vegetation:** The western portion of this quadrat was cultivated until 1982. At that time it was left fallow. Ten acres on the south end were planted to grass and forbs in 1988 and the remaining acreage was mowed and over-seeded in 1992. In 1982 about 15 of the southeastern 20 acre field was planted to native grasses and a few forb seeds. An extensive line of cottonwoods has come in along the southern boundary of the hydric soils and a portion of the southeastern field was grown up in dogwoods and other secondary growth.
  - **Other:** There was a wildlife observation blind constructed in 1998 along the levee south of 35th Street and just east of the diagonal levee.

Southwest Quadrat ~ 155 acres

- ***Virgin Wetland Meadow:*** There was about 37 acres of meadow in the northwest corner of this quadrate. It apparently had been mowed annually for hay prior to our receiving the land. There was a low levee on the west that paralleled Louisiana Street. The meadow drained to the east along the levee that paralleled 35th street.
- ***Cultivated Fields ~ 110 acres:*** This area was lightly "W-ditched" with the ditches running to the north. The water then drained to the east, eventually entering Mink Creek. It was later discovered that a single 6" lateral traversed the northeastern portion and connected with the subterranean tile to the east. This area was fairly effectively drained except along the northern edge.
- ***Southern Dump Site:*** In 1968 there was an old broken down bulldozer and steam shovel sitting in the field at the southern end of the central road. In addition there was a large extent of refuse that had been dumped on both sides of the river levee. This trash extended approximately 200+ feet north of the levee. The road to this site was well traveled and unsecured. It had become a dump for local residences as well as Haskell and required large gates and a period of transition before trash was no longer left along the road or the entrance gate. Even after 35th street had been closed in 1971, people continued to periodically dump their trash at the east gate. On the river side of the levee there were large amounts of concrete and brick debris for about 130 yards to the east and about 70 yards to the west.

- ***Gas Meter Houses:*** There were a series of metal sheds that were just north of the dump site which contained meter gages for the gas pipeline. I recall perhaps 6 such structures.
- ***Changes that have occurred:***
  - **Cultivation:** This area was planted into several pure stands of prairie grass for harvesting the seed in order to plant other areas. Ten acres of switchgrass was planted in 1970. More grass strips of switchgrass, indiangrass, and big bluestem were planted in 1971 and 1972. A ten acre strip of mixed grass was planted in 1977 and another in 1986. The remaining 60 acres was planted with native grass and forbs in 1991.
  - **Vegetation:** The native area was mowed for hay every year until 1982. Since then it has been periodically burned. The northern half of the cultivated area has developed into significant wetland vegetation. The southern portion is mostly non-hydric soils and consists of 7-10 ft. tall native grass species which are burned every other year.
  - **Utilities:** In 1989 Williams Gas Company replaced two of the gas lines on the west side of the central road. One line continued north to the meter valve house and connected to the line that diagonals to the northwest. The second line originally went from the meter houses and diagonalled across the native prairie. They replaced it by going north to the E-W center road and then down the center of the road to the west.
  - **Hydrology:** In 1970-71 the flood canal was constructed along Louisiana Street. The newly constructed levee was planted to native grasses but approximately 5 acres of the virgin prairie tract was lost to the canal and levee. In 1992 there was a N-S levee constructed to the west of the new gas lines with a WCS in the north end of it. Also within this area was constructed a nesting island. Once the subterranean tile was plugged this area became much wetter.
  - **Dump site:** Early in the fall of 1968 the bulldozer and steam shovel were sold as scrap metal and the refuse was bulldozed over the levee. This was the era before plastic so a majority of the material was paper, wood, glass, tin or steel and most has long since decomposed. In the past 5 years 12 large dumpsters of scrap metal has been recycled. Most of these materials were barrels, 5 gallon buckets, roofing tin, fencing, refrigerators, washing machines, bed springs, and car parts. There is very little glass and hardly any material other than metal and concrete/brick rubble that remains in the dump.

APPENDIX B
Section 106 MOA

July 1, 2003

Donald R. Curtis, Jr.
Colonel, Corps of Engineers
Kansas City District, Corps of Engineers
700 Federal Building
Kansas City, MS

RE: South Lawrence Trafficway - Kansas Highway 10 Bypass.

Dear Colonel Curtis:

The enclosed agreement regarding the above referenced project has been executed by ACHP. This action constitutes the comments of ACHP required by Section 106 of the National Historic Preservation Act and the Council's regulations. Please provide a copy of the fully-executed agreement to the other signatories and your Federal Preservation Officer.

The Council appreciates your cooperation in reaching a satisfactory resolution of this matter.

Sincerely,

Nancy Kochan

Nancy Kochan
Office Administrator
Western Office of Federal
Agency Programs

Enclosure

ADVISORY COUNCIL ON HISTORIC PRESERVATION

12136 West Bayaud Avenue, Suite 330 • Lakewood, Colorado 80228
Phone: 303-969-5110 • Fax: 303-969-5115 • achp@achp.gov • www.achp.gov

MEMORANDUM OF AGREEMENT
AMONG THE
U.S. ARMY CORPS OF ENGINEERS, KANSAS CITY DISTRICT; KANSAS STATE HISTORIC PRESERVATION OFFICER; KANSAS DEPARTMENT OF TRANSPORTATION; BAKER UNIVERSITY; DOUGLAS COUNTY, KANSAS; AND ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE
KANSAS HIGHWAY 10 BYPASS (SOUTH LAWRENCE TRAFFICWAY)
IN
DOUGLAS COUNTY, KANSAS

WHEREAS, the Kansas Department of Transportation (KDOT) proposes to construct a 4-lane Kansas Highway 10 bypass and a 4-lane local road (the undertaking) identified respectively as 32nd Street Alignment B and relocated 31st Street in the city of Lawrence, Douglas County, Kansas; and

WHEREAS, the U.S. Army Corps of Engineers, Kansas City District (KCD) has assumed responsibility as the lead Federal agency for processing KDOT's proposal in accordance with the provisions of the National Environmental Policy Act and is responsible for ensuring compliance with Section 106 of the National Historic Preservation Act (NHPA); and

WHEREAS, the National Park Service's Keeper of the National Register of Historic Places has determined that the Haskell Agricultural Farm Property (HAFP) is a historic site eligible for listing on the National Register of Historic Places (NRHP) (See Attachment A); and

WHEREAS, KCD has determined that issuance of a permit under authority of Section 404 of the Clean Water Act (Section 404) to authorize the undertaking will have an adverse effect on the HAFP, and has consulted with the signatories to this Memorandum of Agreement (MOA) which include the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (Council) pursuant to the Council's implementing regulations for Section 106 of the NHPA (36 CFR Part 800); and

WHEREAS, KCD has consulted with KDOT, Douglas County, and Baker University regarding the effects of the undertaking on the HAFP and has included them as invited signatories to this MOA; and

WHEREAS, KCD has consulted with Haskell Indian Nations University (HINU) and the U.S. Bureau of Indian Affairs (BIA) regarding the effects of the undertaking on the HAFP and has invited them to become concurring parties to this MOA, and has been informed by both entities that they do not wish to be concurring parties; and

WHEREAS, KCD has consulted with all Federally-recognized Indian tribes regarding the proposed undertaking and has further consulted with all tribes that have indicated that the HAFP may have cultural significance to them; and

WHEREAS, KCD has consulted with various organizations and individuals that expressed an interest in Section 106 issues relating to the undertaking; and

WHEREAS, in accordance with 36 CFR 800.6(a)(1), KCD has notified the Council of its adverse effect determination and has provided the Council with required documentation, and the Council has chosen to participate in consultation pursuant to 36 CFR 800.6(a)(1)(iii);

NOW, THEREFORE, KCD, SHPO, Council, KDOT, Douglas County, and Baker University agree that the undertaking shall be implemented in accordance with the following stipulations in order to resolve the adverse effect of the undertaking on the HAFP.

STIPULATIONS

1. The Kansas City District shall condition Section 404 authorization for the undertaking, where appropriate, to ensure that the stipulations of this MOA are implemented.

2. The Kansas Department of Transportation shall relocate the existing section of 31st Street (located on the HINU campus) to an alignment immediately north of the Kansas Highway 10 bypass (32nd Street Alignment B) on Baker University property in Baker Wetlands (See Attachment A). The Kansas Department of Transportation shall remove the abandoned section of 31st Street, including bedding material, located on the HINU campus and shall grade the vacated right-of-way to approximate the contours/elevations of existing adjacent ground. The Kansas Department of Transportation shall confer with HINU/BIA representatives to develop and implement a vegetative planting scheme for the vacated 31st Street right-of-way.

3. Douglas County, Kansas shall vacate the section of 31st Street located on the HINU campus and shall relinquish its easement for the right-of-way to the United States of America.

4. The Kansas Department of Transportation shall relocate Haskell Avenue approximately 1,000 feet east of its present location and Louisiana Street approximately 2,500 feet west of its present location for those sections of the roads located adjacent to that portion of the HAFP located in Baker Wetlands (See Attachment A). The Kansas Department of Transportation shall remove the abandoned sections of Haskell Avenue and Louisiana Street and grade the right-of-ways to approximate the contours/elevations of the existing adjacent ground. The Kansas Department of Transportation shall ensure that approximately 304 acres of mitigation wetlands will be developed in the areas created between the relocated and vacated roads (See Attachment A). The Kansas Department of Transportation shall convey a conservation easement in accordance with K.S.A. 58-3810, et. Seq., on the approximately 304 acre wetland mitigation area, to limit its future use to that consistent with this agreement, prior to a transfer of the property to a second party.

5. The Kansas Department of Transportation shall ensure that the width of the roadway corridor within the HAFP is the minimum necessary to accommodate the eventual construction of a four-lane Kansas Highway 10 bypass and relocation of 31st Street with four lanes. The Kansas

Department of Transportation shall ensure that the roadways, medians between opposing lanes, and the roadway shoulders are the minimum width necessary to satisfy highway transportation safety standards in order to minimize the adverse impact of the roadway corridor on the HAFP.

6. The Kansas Department of Transportation shall construct a 12-foot-high wall (as measured from the roadway surface) along the north side of the highway bypass and a 6-foot-high wall located on a 6-foot-high berm (the top of the wall will be located 12 feet above the roadway surface) on the south side of the bypass along that portion of the bypass located within the HAFP to minimize traffic noise and visual disturbance in areas outside the bypass corridor (See Attachment B). The walls shall be painted/tinted to blend with the background and shall be screened with vegetative plantings to obscure their presence from areas outside the roadway corridor.

7. The Kansas Department of Transportation shall develop and implement a plan to minimize construction-related impacts to the HAFP. The plan must be approved by KCD and shall be incorporated into the special conditions of KCD's Section 404 authorization for the undertaking. All construction equipment shall be either low ground pressure types or be required to operate on log mats. No grubbing will be allowed within the HAFP (cutting woody vegetation will be allowed). No staging areas or lay down yards will be located in the HAFP. Construction of the roadway embankment within the HAFP will be limited to 300-meter-long sections at any one time.

8. The Kansas Department of Transportation shall ensure that the final roadway design will minimize adverse impacts to the HAFP, to the maximum extent practicable. The Kansas Department of Transportation shall also ensure that the final roadway design will avoid the historic east-west dike and drainage canal located immediately south of the existing 31st Street between Haskell Avenue and Louisiana Street, all historic water control gate structures, and all historic bridges within the HAFP.

9. The Kansas Department of Transportation shall document the HAFP features impacted by the undertaking by preparing a permanent record of the features through use of photographs, detailed drawings, and narrative, as appropriate. The Kansas Department of Transportation shall consult with and take direction from the SHPO to ensure preparation of a complete record.

10. If the Kansas Department of Transportation determines that lighting is required for traveler safety within that portion of the undertaking located within the HAFP, it shall limit such lighting to the minimum necessary to ensure traveler safety and shall install such lighting in a manner that will minimize impacts to areas outside the roadway corridor.

11. The Kansas Department of Transportation shall monitor construction activities and shall inform all contractors to be alert to the potential for the discovery of cultural resources. If artifacts or previously unidentified archaeological sites are encountered, or if the undertaking will result in unanticipated effects to an existing historic property, KDOT shall stop construction activities that have a potential to impact such properties and shall immediately notify KCD and the SHPO that such action has taken place. In the event of such notification, KCD will consult

with the SHPO and other interested parties, as necessary, to determine an appropriate course of action.

12. If human remains are discovered, all work within the area of discovery shall stop immediately, the area shall be protected from further disturbance, and local law enforcement and the State Archaeologist shall be contacted immediately, in accordance with the Kansas Unmarked Burial Sites Preservation Act (K.S.A. 75-2741 through 75-2754). In the event of a discovery of human remains KDOT shall comply with all provisions of the Unmarked Burial Sites Preservation Act.

13. The Kansas Department of Transportation shall invite all Kansas reservation tribes to provide a representative to monitor all project-related excavation activities within the HAFP for the inadvertent discovery of unmarked burials. The Kansas Department of Transportation shall also accommodate any Federally-recognized tribe that wishes to monitor excavation activities within the HAFP. The Kansas Department of Transportation shall have the right to limit the number of tribal monitors on the construction site to a total of five, at any given time, and to impose such additional safety restrictions on monitors as it deems appropriate. Nothing in this stipulation shall require construction activities to be delayed due to the inability of monitors to be present on site during excavation activities.

14. This MOA will be null and void if Section 404 authorization is not granted for the undertaking.

15. This MOA will be terminated after construction of the undertaking has been completed for that portion of the project located in the HAFP, and when all mitigation stipulated in this agreement and any related mitigation stipulated in a Section 404 permit issued for the undertaking have been completed.

16. Should any signatory or invited signatory to this MOA object, in writing, to the manner in which the terms of this MOA are being implemented, KCD shall consult with the objecting party to resolve the issue. If KCD determines, within 30 days of the objection, that such objection cannot be resolved, KCD shall:

A. Forward all documentation relevant to the dispute to the Council. Within 30 days of receipt of adequate documentation, the Council shall review and advise KCD on the resolution of the objection. Any comments provided by the Council and all comments from the signatories and invited signatories to the MOA will be taken into account by KCD in reaching a final decision regarding the dispute.

B. If the Council does not provide comments regarding the dispute within 30 days after receipt of adequate documentation, KCD may render a decision regarding the dispute. In reaching its decision, KCD shall take into account all comments from the signatories and invited signatories to the MOA.

C. The Kansas City District's responsibility to carry out all other actions subject to the

terms of this MOA, that are not the subject of the dispute, will remain unchanged. The Kansas City District shall notify all signatories and invited signatories, in writing, of its decision relating to that portion of the agreement in dispute prior to implementation of its decision. The Kansas City District's decision will be final.

17. If any signatory or invited signatory to this MOA determines that the terms of this agreement cannot be or are not being carried out, that party shall immediately consult with the other signatories and invited signatories to develop an amendment to this MOA pursuant to 36 CFR 800.6(c)(7) and 800.6(c)(8). The amendment will be effective on the date a copy signed by all of the original signatories and invited signatories is filed with the Council. If the signatories and invited signatories cannot agree to appropriate terms to amend the MOA, any signatory or invited signatory may terminate the agreement in accordance with Stipulation 18, below.

18. If this MOA is not amended following the consultation procedures set out in Stipulation 17, above, it may be terminated by any signatory or invited signatory. If this agreement is terminated KCD shall either execute a memorandum of agreement with signatories and invited signatories under 36 CFR 800.6(c)(1) or request comments from the Council under 36 CFR 800.7(a) and proceed accordingly.

19. Execution of this MOA by KCD, SHPO, Council, KDOT, Douglas County, and Baker University, and the submission of documentation and filing of this MOA with the Council pursuant to 36 CFR 800.6(b)(1)(iv) prior to KCD's issuance of Section 404 authorization for the undertaking, and implementation of its terms evidence that KCD has taken into account the effects of this undertaking on historic properties and afforded the Council an opportunity to comment.

SIGNATORIES:

U.S. Army, Corps of Engineers, Kansas City District

_____ Date 5-1-03
Donald R. Curtis, Jr., Commander

Kansas State Historical Society

_____ Date 05-01-03
Mary R. Allman, State Historic Preservation Officer

Advisory Council on Historic Preservation

_____ Date 6/20/03
John M. Fowler, Executive Director

INVITED SIGNATORIES:

Douglas County, Kansas

_____ 05-01-03 Date
Bob Johnson, County Commission Chairman

Baker University

_____ 5-1-03 Date
Dr. Daniel M. Lambert, President

Kansas Department of Transportation

_____ 5-12-03 Date
Debra L. Miller, Secretary of Transportation

Preserving America's Heritage

October 10, 2007

Colonel Roger A. Wilson, Jr.
District Commander
Kansas City District
U.S. Army Corps of Engineers
700 Federal Building
Kansas City, MO 64106-2896

Ref: *First Amendment to the Memorandum of Agreement for the South Lawrence Trafficway Project Lawrence, Kansas*

Dear Colonel Wilson:

The Advisory Council on Historic Preservation (ACHP) has executed the enclosed amendment adding the Federal Highway Administration (FHWA) as a signatory to the Memorandum of Agreement regarding the South Lawrence Trafficway. This action constitutes the comments of the ACHP required by Section 106 of the National Historic Preservation and the ACHP's regulations. Please provide copies of the fully executed amendment to the other signatories.

Thank you for inviting our participation in amending this agreement. Should you have any questions or require the additional assistance of the ACHP, please contact me at (202) 606-8522 or by e-mail at clegard@achp.gov.

Sincerely,

Charlotte Fenks

for Carol Legard
FHWA Liaison
Office of Federal Agency Programs

Enclosure

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 803 • Washington, DC 20004
Phone: 202-606-8503 • Fax: 202-606-8647 • achp@achp.gov • www.achp.gov

FIRST AMENDMENT TO THE
MEMORANDUM OF AGREEMENT
AMONG THE
U.S ARMY CORPS OF ENGINEERS, KANSAS CITY DISTRICT; KANSAS STATE HISTORIC PRESERVATION OFFICER; KANSAS DEPARTMENT OF TRANSPORTATION; BAKER UNIVERSITY; DOUGLAS COUNTY, KANSAS; AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE
KANSAS HIGHWAY 10 BYPASS (SOUTH LAWRENCE TRAFFICWAY)
IN
DOUGLAS COUNTY, KANSAS

WHEREAS, the U.S. Army Corps of Engineers, Kansas City District (KCD) executed a Memorandum of Agreement (MOA) for the proposed South Lawrence Trafficway, effective June 20, 2003, with Kansas State Historic Preservation Officer (SHPO); Kansas Department of Transportation (KDOT); Baker University; Douglas County, Kansas; and Advisory Council on Historic Preservation (ACHP); and

WHEREAS, the June 20, 2003 MOA was developed and executed in accordance with 36 CFR 800.6, regulations implementing Section 106 of the National Historic Preservation Act (16 USC 470f)(Section 106); and

WHEREAS, FHWA subsequently obtained funding, in its Fiscal Year 2006 appropriation, for the purpose of beginning construction of the South Lawrence Trafficway and therefore must comply with Section 106 with regard to this undertaking; and

WHEREAS, the Federal Highway Administration (FHWA) intends to adopt the KCD's existing South Lawrence Trafficway Final Environmental Impact Statement dated December 2002.

WHEREAS, the FHWA is completing a Section 4(f) Evaluation for the Haskell Agricultural Farm Property.

WHEREAS, the FHWA intends to complete its own Record of Decision for the action of constructing the South Lawrence Trafficway.

WHEREAS, the FHWA agrees with all of the stipulations and conditions in the existing MOA.

NOW, THEREFORE, the FHWA and the signatories to the MOA agree that the KCD will be the lead Federal agency for Section 106 compliance for the South Lawrence Trafficway project, that they will continue complying with the MOA, and that FHWA shall be added as signatory to the existing MOA.

SIGNATORIES:

U.S. Army Corps of Engineers, Kansas City District

Date: 10 Aug 07

Roger A. Wilson, Jr., District Commander

Federal Highway Administration

Date: 8/20/2007

J. Michael Bowen, Division Administrator

Kansas State Historical Society

Date: 8-21-07

Jennie Chinn, State Historic Preservation Officer

Advisory Council on Historic Preservation

Date: 10/10/07

John M. Fowler, Executive Director

INVITED SIGNATORIES:

Douglas County, Kansas

Date: 09-10-07

Robert Johnson, Chairman, County Commission

Baker University

Date: 8/20/07

Pat Long, President

Kansas Department of Transportation

Date: 8-20-07

Debra L. Miller, Secretary of Transportation

APPENDIX C
Corps' Section 404 Permit

DEPARTMENT OF THE ARMY PERMIT

Permittee Kansas Department of Transportation

Permit No. 200101697

Issuing Office U.S. Army Engineer District, Kansas City

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below, and with the plans and drawings attached hereto which are incorporated in and made a part of this permit.

Project Description: Relocation of an approximately seven-mile-long section of Kansas Highway 10 from its current alignment through the city of Lawrence, Kansas to a location south of the city on an alignment identified as 32nd Street Alignment B.

Permit Drawings: Plan views, cross sections, Sheets 1 and 2 of 2, dated January 2004

Project Location: In wetlands, drainages and other waters of the U.S. in Sections 7, 8, 10, 11, 15, 16, 17 and 18, in Township 13 south, Range 20 east; and in Sections 12, 13 and 24, in Township 13 south, Range 19 east, in and near the city of Lawrence, in Douglas County, Kansas.

(Latitude: 38.92635365 - Longitude: 95.23291272)

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on 31 December 2013. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

See continuation sheets, pages 4 through 8, of this document.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorization required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(PERMITTEE) 2-27-04 (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

(DISTRICT ENGINEER) 3-4-04 (DATE)
DONALD R. CURTIS, JR.
COLONEL, CORPS OF ENGINEERS
DISTRICT ENGINEER

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE) (DATE)

Special Conditions:

a. You must sign and return a "Compliance Certification" after you complete the authorized work and any required mitigation. Your signature will certify that you completed the work in accordance with this permit, including the general and specific conditions, and that any required mitigation was completed in accordance with permit conditions.

b. If any part of the authorized work is performed by a contractor, before starting work, you must discuss the terms and conditions of this permit with the contractor; and, you must give a copy of this entire permit to the contractor.

c. You must use clean, uncontaminated materials for fill in order to minimize excessive turbidity by leaching of fines, as well as to preclude the entrance of deleterious and/or toxic materials into waters of the United States by runoff or by leaching.

d. You must dispose of excess concrete and wash water from concrete trucks and other concrete mixing equipment in a nonwetland area landward of the ordinary high water mark and at a location where the concrete and wash water cannot enter a water body or an adjacent wetland.

e. You must excavate and/or fill in waters of the U.S. in a manner that will minimize increases in suspended solids and turbidity, which may degrade water quality and damage aquatic life outside the immediate area of operation.

f. You must immediately remove and properly dispose of all debris during every phase of the project in order to prevent the accumulation of unsightly, deleterious, and/or toxic materials in or near a water body.

g. You must not dispose of any construction debris or waste materials below the ordinary high water mark of any water body, in a wetland area, or at any location where the materials could be introduced into a water body or a wetland as a result of runoff, flooding, wind, or other natural forces.

h. You must store all construction materials, equipment, and petroleum products, when not in use, above anticipated high water levels.

i. You must restrict the clearing of timber and other vegetation to the absolute minimum required to accomplish the work. Clearing, grading and replanting should be planned and timed so that only the smallest area necessary is in a disturbed, unstable, or unvegetated condition.

j. Upon completion of earthwork operations, you must seed, replant or otherwise protect from erosion all fills in the water or on shore, and any other areas on shore disturbed during construction. If seeding does not successfully vegetate the disturbed areas by the end of the first growing season, you must implement alternative measures to protect the disturbed areas from further erosion. You must contact the Kansas City District, Regulatory Branch prior to beginning work on any additional erosion control measures so that a determination can be made whether further authorization is required.

Special Conditions (continued):

k. You must ensure that the placement of culverts and other work affecting drainages does not cause an increase in flooding to adjacent property owners and that such work does not significantly impact sheet flows in the Wakarusa River floodplain, except where work is intended to create wetter conditions to develop or enhance wetlands.

l. You must take the actions required to record this permit with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records of title to or interest in real property. You must furnish a copy of the recorded instrument, with the recorder's stamp, to the Kansas City District within two months from the date of this permit.

m. You must comply with the conditions stipulated in the attached documents:

1. Kansas Department of Health and Environment Water Quality Certification, dated December 10, 2003.

2. "Memorandum Of Agreement Among The U.S. Army Corps Of Engineers, Kansas City District; Kansas State Historic Preservation Officer; Kansas Department Of Transportation; Baker University; Douglas County, Kansas; Advisory Council On Historic Preservation Regarding The Kansas Highway 10 Bypass (South Lawrence Trafficway) In Douglas County, Kansas."

3. "Special Procedures for Construction Activities Within the Haskell Agricultural Farm Property," dated January 30, 2004.

n. **PROJECT STATUS REPORTING.** Due to the 10-year duration of this permit, you must submit a project status report to the Kansas City District's Regulatory Branch in the 4th quarter (October 1 through December 31) of the year 2008. Additional supplemental "event driven" status reports must be submitted when major segments or phases of the project are completed or when significant changes in the project design or construction schedule occur. The content of these supplemental status reports will be limited to a discussion of the event that has triggered the need for an update. The project status report due in the year 2008, must include:

1. A signed document certifying that all work completed prior to submittal of the report was completed in accordance with the terms and conditions of this permit, including the general and project specific conditions, and that any required mitigation was completed in accordance with permit requirements.

2. The status of project construction and mitigation development (by phase if appropriate).

3. Proposed changes in project design such as centerline location and the anticipated environmental impacts that are expected to result from the authorized work due to changes in laws or listings (threatened or endangered species, National Register eligible or listed properties, etc.), physical conditions, or other factors affecting the public interest.

Special Conditions (continued):

4. Since site conditions are subject to change, wetland jurisdiction determinations are valid for a period of 5 years or less. A reevaluation of the original delineation provided to and approved by the Kansas City District must be submitted to the Kansas City District's Regulatory Branch with the project status report in the year 2008, to determine if wetland conditions within the permit area have changed.

The December 31, 2013, expiration date shown in General Condition 1 of this permit will become null and void, and the permit will expire on December 31, 2008, if the required project status report is not received on or before December 31, 2008, in accordance with the criteria stipulated in this Special Condition.

Note: You must apply for a separate permit or request a modification to this permit before you perform any work in waters of the United States that is not authorized by this permit. This requirement applies to new work (work not previously considered/evaluated by the Kansas City District) including changes to existing plans.

o. **MITIGATION REQUIREMENTS:**

1. You must construct/develop/implement all of the mitigation features described in the Final Environmental Impact Statement (Final EIS) prepared for this project, unless specified otherwise on the drawings or in the Special Conditions of this permit. Wetland mitigation includes the creation of 304 acres of wetlands on agricultural lands located west of the existing Louisiana Street and east of the existing Haskell Avenue, as shown on Sheets 1 and 2 of the drawings attached to this permit. The existing 17-acre "Santa Fe Wetland Mitigation Site," created by Douglas County to provide mitigation credits for relocation of K-10 Highway will be applied as a 17-acre mitigation credit for this project.

2. You must relocate the existing section of 31st Street located on the Haskell Indian Nations University (HINU) campus to an alignment immediately north of the new section of K-10 Highway on Baker University property, as shown on Sheets 1 and 2 of the drawings attached to this permit. You must also remove the abandoned section of 31st Street located on the HINU campus, including bedding material, and grade the vacated right-of-way to approximate the contours/elevations of the existing undisturbed adjacent ground. You must confer with HINU/Bureau of Indian Affairs representatives to develop and implement a vegetative planting scheme for the vacated right-of-way.

3. You must complete construction of all wetland mitigation features described in the Final EIS and this permit, except for the "Wetland And Cultural Educational Center," no later than 2 years after initiation of project-related fill activities in wetlands. Such mitigation features include but are not limited to relocation of Haskell Avenue and Louisiana Street, construction of wetlands, construction of parking and camping areas, and construction of hike and bike trails.

4. You must complete construction of the "Wetland And Cultural Educational Center," no later than 5 years after initiation of project-related fill activities in wetlands.

Special Conditions (continued):

5. You must complete the work described in Paragraph (2) of this Special Condition within 1 year after opening the relocated section of 31st Street to public use.

6. You must complete construction of all mitigation features described in the Final EIS and this permit, that are not intended to compensate for wetland losses and are not addressed in Paragraphs (1) and (5) of this Special Condition, prior to opening the section of relocated highway passing through Baker Wetlands to public use. Such mitigation features include but are not limited to noise walls, landscaping, and roadway runoff control features within Baker Wetlands.

7. The 304-acre wetland mitigation areas described in Paragraph (1) of this Special Condition must be protected from man-induced disturbances that would affect their ability to function as wetlands and must be preserved as wetlands in perpetuity. The vacated 31st Street right-of-way discussed in Paragraph (2) of this Special Condition is not subject to this requirement since the permittee does not control the property.

p. **WETLAND MITIGATION SUCCESS CRITERIA:**

1. Mitigation wetlands must meet wetland criteria, as defined in the Corps of Engineers 1987 delineation manual, titled "Corps of Engineers Wetlands Delineation Manual," by the end of the third growing season occurring after construction/development of mitigation areas. If mitigation wetlands do not meet wetland criteria at the end of the third growing season, and if the Kansas City District determines that corrective action is necessary, you must evaluate the cause of the failure and initiate remedial work to correct the problem. Such remedial work must be approved in writing by the Kansas City District prior to initiation of the corrective action.

2. You must monitor wetland mitigation areas for 3 growing seasons in order to evaluate the success of mitigation efforts. An annual monitoring report must be submitted to the Kansas City District beginning with the year of construction of mitigation areas and extending through at least 3 growing seasons. The monitoring report is due by December 31, of each reporting year and must contain sufficient information for the Kansas City District to evaluate the status of mitigation efforts. The report shall contain site photographs, plant survey transects, species composition, percent of vegetative cover, and other information, as necessary, to evaluate the success of mitigation efforts. If mitigation areas meet the wetland criteria stipulated in Paragraph (1) of this Special Condition at the end of the third growing season no additional monitoring will be required. If mitigation areas do not meet wetland criteria at the end of the third growing season, additional annual monitoring reports will be required until the Kansas City District determines that mitigation efforts are successful.

3. Construction and success of mitigation areas will not be considered complete until approved in writing by the Kansas City District.

Special Conditions (continued):

4. Paragraphs (1) and (2) of this Special Condition do not apply to the vacated 31st Street right-of-way discussed in Paragraph (2) of Special Condition o.

q. You must perform the work authorized by this permit in a manner that will minimize wetland losses and degradation of wetlands remaining after completion of construction activities.

r. You must mark the boundary of the project's right-of-way within Baker Wetlands to ensure that the operation of construction equipment and other project-related activities do not encroach on wetlands located outside the right-of-way. Such markings must be clearly visible to equipment operators and other construction personnel and must provide a suitable buffer to ensure that wetlands located outside the right-of-way are not inadvertently impacted by construction activities.

s. The work authorized by this permit must conform to the project plans and details presented in the Final EIS prepared for this project, titled "Final Environmental Impact Statement – Section 404 Permit Application – by – Kansas Department of Transportation – K-10 Highway (South Lawrence Trafficway)," dated December 2002, unless specified otherwise on the drawings or in the Special Conditions of this permit.

K A N S A S

RODERICK L. BREMBY, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

DEPARTMENT OF HEALTH AND ENVIRONMENT

December 10, 2003

Mr. Joseph S. Hughes, Chief
Regulatory Branch
U.S. Dept. Army Corps of Engineers
Regulatory Branch
700 Federal Building
Kansas City, MO 64106-2896

RE: Section 401 Water Quality Certification for Public Notice 200101697; Project by Kansas Department of Transportation (commonly known as the South Lawrence Traffic Way) to relocate approximately 7 miles of Kansas Highway 10 to bypass city of Lawrence. The project will consist of grading, construction of bridges and culverts, placement of paving and other related work to complete construction of a 4-lane road. The work will result in the loss of an estimated 55.4 acres of wetlands, impacts to 2,800 linear feet of stream channel and loss of 100 linear feet of stream channel.

Dear Mr. Hughes:

The Kansas Department of Health and Environment has received a request for Section 401 Water Quality Certification. We have reviewed the project and have determined the project has the following water pollutant discharge sources:

1. Construction activities including grading and filling, equipment and materials storage, equipment fueling and maintenance, etc.

2. Loss of wetlands.

3. Loss of riparian vegetation along stream channels.

4. Precipitation runoff from road surfaces

5. Abandoned 31st Street right-of-way

6. Use and operation of the completed roadway

Attachment 1

Discharges from these sources if not minimized or otherwise controlled may cause surface waters of the state [KAR 28-16-28b(eee)] and specifically the Lower Wakarusa River and Baker Wetlands to violate of the provisions of Kansas Water Quality Standards found at KAR 28-16-28b et seq. Baker Wetlands is designated "special aquatic life use water" [KAR 28-16-28d(a)(2)(A)]. The Lower Wakarusa River is designated for expected aquatic life support, primary contact recreation B, domestic water supply, food procurement, groundwater recharge, industrial water supply, irrigation and livestock watering. The Lower Wakarusa has a medium priority fecal coliform bacteria total maximum daily load (TMDL) established January 26, 2000. Baker Wetlands has a low dissolved oxygen TMDL established January 26, 2000.

Pursuant to Section 401and KAR 28-16-28(c) the Kansas Department of Health and Environment finds this project will not result in a violation of Kansas Water Quality Standards and herewith issues a Water Quality Certification for construction and subsequent operation of the project subject to the following conditions:

1. The Kansas Department of Transportation shall avoid or control the discharge of suspended solids from the project so that the project does not cause:

   a. Any surface waters of the state within and below the project area to contain discarded solid material, including trash, garbage rubbish, offal, grass clippings, discarded building or construction materials, car bodies, tires, wire and other unwanted or discarded materials [KAR 28-16-28e(b)(3)].

   b. Any surface waters of the state within and below the project to have floating debris, scum, foam, froth and other floating materials directly or indirectly attributable to the project [KAR 28-16-28e(b)(4)].

   c. Any surface waters of the state within or below the project to have of deposits of sludge or fine solids [KAR 28-16-28e(b)(6)].

   d. Alteration of the natural appearance of surface waters of the state within or below the project by the addition of color-producing or turbidity-producing substances of artificial origin [KAR 28-16-28e(b)(8].

   e. The concentration of dissolved oxygen in the Lower Wakarusa River and Baker Wetlands to be lower than 5.0 mg/L [KAR 28-16-28e(c)(2)(A)].

   f. Addition of suspended solids to the Lower Wakarusa River or Baker Wetlands in amounts and concentrations that will interfere with the behavior, reproduction, physical habitat, or other factors related to the survival and propagation of aquatic or semiaquatic life or terrestrial wildlife [KAR 28-16-28e(c)(2)(D)].

2. The Kansas Department of Transportation shall avoid or control the discharge of toxic substances, oil and grease and other fluids from the project so that the project does not cause:

a. Any surface waters of the state within and below the project area to have a public health hazard, nuisance condition or impairments of designed uses [KAR 28-16-28e(b)(1)].

b. Any surface waters of the state within and below the project area to have toxic substances, radioactive isotopes, and infectious microorganisms in concentrations or in combinations that jeopardize the public health or the survival or well-being of livestock, domestic animals, terrestrial wildlife or aquatic or semiaquatic life [KAR 28-16-28e(b)(2)].

c. Any surface waters of the state within and below the project area to have a visible oil and grease film or sheen on the water surface or on submerged substrate or adjoining shore lines, nor have a sludge or emulsion deposit below the water surface of adjoining shorelines [KAR 28-16-28e(b)(5)].

d. Any surface waters of the state within and below the project to contain taste and odor producing substances at concentrations which interfere with the production of potable water by conventional water treatment processes, impart an unpalatable flavor to edible aquatic or semiaquatic life or terrestrial wildlife or that result in noticeable odors in the vicinity [KAR 28-16-28e(b)(7)].

e. The concentration of dissolved oxygen in the Lower Wakarusa River or Baker Wetlands to be lower than 5.0 mg/L [KAR 28-16-28e(c)(2)(A)].

f. The pH of the Lower Wakarusa River or Baker Wetlands to be below 6.5 or above 8.5 [KAR 28-16-28e(c)(2)(C)].

g. Concentrations of toxic substances listed in Tables 1a, 1b, and 1c [KAR 28-16-28e(d)] in the Lower Wakarusa River or Baker Wetlands to exceed the criteria set out in these tables [KAR 28-16-28e(c)(2)(F) & KAR 28-16-28e(c)(4)(A)].

h. In the Lower Wakarusa River or Baker Wetlands, harmful concentrations of any substance alone or in combination with other substances causing toxic, carcinogenic, teratogenic, or mutagenic effects in humans [KAR 28-16-28e(c)(3)(C)].

i. Concentrations of substances that bioaccumulate in the tissues of edible organisms to exceed a cancer risk level of (10^{-6}) in persons consuming organisms taken from the Lower Wakarusa River or Baker Wetlands [KAR 28-16-28e(c)(4)(B)].

3. The Kansas Department of Transportation shall avoid or control the discharge of plant nutrients from the project so that the project does not cause:

a. Accelerated succession or replacement of aquatic biota or the production of undesirable quantities or kinds of aquatic life in the Lower Wakarusa River or Baker Wetlands [KAR 28-16-28e(c)(2)(B)].

b. Cause the development of objectionable concentrations of algae or algal by-products or nuisance growths of submersed, floating, emergent aquatic vegetation in the Lower Wakarusa River or Baker Wetlands [KAR 28-16-28e(c)(7)(A)].

4. The Kansas Department of Transportation shall avoid or control the discharge of *Escherichia-coli* bacteria from the project so that the project does not cause the *Escherichia-coli* bacteria concentration of the Lower Wakarusa River exceed a geometric mean of 262 organisms per 100 milliliters during the period of April through October 31 and geometric mean of 2,358 organisms per 100 milliliters during the period of November 1 through March 31. [KAR 28-16-28e(e)(c)(7)(D)].

5. The Kansas Department of Transportation shall prepare a written project water quality protection plan describing the actions that will be taken to comply with Certification Conditions 1, 2, 3 and 4. This plan shall be submitted to the Kansas Department of Health and Environment - Bureau of Water, Watershed Management Section, Curtis State Office Building, 1000 SW Jackson Street, Suite 420, Topeka, Kansas 66612. This condition may be waived depending on the content of the "stormwater pollution prevention plan" prepared pursuant to condition 6 below. The project water quality protection plan shall specifically address the following items:

a. **Riparian Areas** Minimize removal or disturbance of riparian areas (areas adjacent to water bodies). KDHE encourages the use of vegetation consistent with adjoining vegetation materials to minimize impacts from improper handling of fertilizers and pesticides.

b. **Solid Waste** All waste materials produced by the construction project shall be disposed of in accordance with the provisions of the Kansas solid waste management statutes and regulations (K.S.A. 65-3401 and K.A.R. 28-29-1 et. seq.) or applicable local rules. Good house keeping including personal refuse such as food containers, sacks etc. shall be addressed.

c. **Fuels, Chemicals and Maintenance Areas** All fuels and chemicals necessary to complete the project shall be stored in such a manner that accidental spillage is minimized or can be temporarily contained before reaching the water body. Equipment maintenance areas shall also be located in this manner.

d. **Spills** Should a spill of fuel or discharge of pollutants occur, the local emergency staff should be contacted **first** by dialing 911. The Kansas Department of Health and Environment shall then be notified immediately: **(785)- 296-1679 (24 hours a day.)** These incidences should also be reported to the National Spill Response Center (1-800-424-8802). *Hazardous materials spills and air releases that meet federal reportable quantities must also be reported to Kansas Division of Emergency Management (800-275-0297)."* **These reporting numbers shall be posted in several locations around the site. A Spill Prevention and Response Plan should be prepared.**

e. **Floating Debris** The applicant shall take appropriate measures to capture any floating debris released to surface waters as a result of this project.

f. **Stormwater Conveyance** Runoff from the roadway shall not be discharged to Baker Wetlands but discharged to the Lower Wakarusa River. Stormwater conveyance structures and measures shall be designed to serve as water quality protection measures for the Lower Wakarusa River. Mechanisms such as grass-lined channels, velocity reducers, detention and retention structures and filtration/infiltration areas, including stabilized outfall structures shall be considered.

6. This project is subject to the National Pollutant Discharge Elimination System (NPDES) stormwater permit requirements of 40 C.F.R. 122.26. This certification does not relieve the obligation of the Kansas Department of Transportation to secure such permit. Information on construction site NPDES permits is available from Bureau of Water - Industrial Programs website: www.kdhe.ks.us/stormwater or Mr. Alan Brooks at 785/296-5549.

7. This certification does not relieve the Kansas Department of Transportation of the responsibility for any discharge into waters of the state. The Kansas Department of Health and Environment retains the option of revoking this certification any time an inappropriate discharge may occur. As provided by KSA 65-171(f), failure to comply with the conditions of this certification may subject the responsible party to fines up to $ 10,000 per violation with each day the violation occurs constituting a separate violation.

8. If the applicant believes the conditions of this certification will result in impairment of important social and economic development, the applicant is advised of the variance provisions of KAR 28-16-28b(jjj) and KAR 28-16-28f(e).

Questions concerning this certification may be directed to Mr. Scott Satterthwaite, 785-296-5573.

Sincerely,

Donald D. Snethen P.E.
Chief, Watershed Management Section
Bureau of Water

pc: Julie Coleman, KDHE DEA Northeast District Office

MEMORANDUM OF AGREEMENT
AMONG THE
U.S. ARMY CORPS OF ENGINEERS, KANSAS CITY DISTRICT; KANSAS STATE HISTORIC PRESERVATION OFFICER; KANSAS DEPARTMENT OF TRANSPORTATION; BAKER UNIVERSITY; DOUGLAS COUNTY, KANSAS; AND ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE
KANSAS HIGHWAY 10 BYPASS (SOUTH LAWRENCE TRAFFICWAY)
IN
DOUGLAS COUNTY, KANSAS

WHEREAS, the Kansas Department of Transportation (KDOT) proposes to construct a 4-lane Kansas Highway 10 bypass and a 4-lane local road (the undertaking) identified respectively as 32nd Street Alignment B and relocated 31st Street in the city of Lawrence, Douglas County, Kansas; and

WHEREAS, the U.S. Army Corps of Engineers, Kansas City District (KCD) has assumed responsibility as the lead Federal agency for processing KDOT's proposal in accordance with the provisions of the National Environmental Policy Act and is responsible for ensuring compliance with Section 106 of the National Historic Preservation Act (NHPA); and

WHEREAS, the National Park Service's Keeper of the National Register of Historic Places has determined that the Haskell Agricultural Farm Property (HAFP) is a historic site eligible for listing on the National Register of Historic Places (NRHP) (See Attachment A); and

WHEREAS, KCD has determined that issuance of a permit under authority of Section 404 of the Clean Water Act (Section 404) to authorize the undertaking will have an adverse effect on the HAFP, and has consulted with the signatories to this Memorandum of Agreement (MOA) which include the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (Council) pursuant to the Council's implementing regulations for Section 106 of the NHPA (36 CFR Part 800); and

WHEREAS, KCD has consulted with KDOT, Douglas County, and Baker University regarding the effects of the undertaking on the HAFP and has included them as invited signatories to this MOA; and

WHEREAS, KCD has consulted with Haskell Indian Nations University (HINU) and the U.S. Bureau of Indian Affairs (BIA) regarding the effects of the undertaking on the HAFP and has invited them to become concurring parties to this MOA, and has been informed by both entities that they do not wish to be concurring parties; and

WHEREAS, KCD has consulted with all Federally-recognized Indian tribes regarding the proposed undertaking and has further consulted with all tribes that have indicated that the HAFP may have cultural significance to them; and

WHEREAS, KCD has consulted with various organizations and individuals that expressed an interest in Section 106 issues relating to the undertaking; and

WHEREAS, in accordance with 36 CFR 800.6(a)(1), KCD has notified the Council of its adverse effect determination and has provided the Council with required documentation, and the Council has chosen to participate in consultation pursuant to 36 CFR 800.6(a)(1)(iii);

NOW, THEREFORE, KCD, SHPO, Council, KDOT, Douglas County, and Baker University agree that the undertaking shall be implemented in accordance with the following stipulations in order to resolve the adverse effect of the undertaking on the HAFP.

STIPULATIONS

1. The Kansas City District shall condition Section 404 authorization for the undertaking, where appropriate, to ensure that the stipulations of this MOA are implemented.

2. The Kansas Department of Transportation shall relocate the existing section of 31st Street (located on the HINU campus) to an alignment immediately north of the Kansas Highway 10 bypass (32nd Street Alignment B) on Baker University property in Baker Wetlands (See Attachment A). The Kansas Department of Transportation shall remove the abandoned section of 31st Street, including bedding material, located on the HINU campus and shall grade the vacated right-of-way to approximate the contours/elevations of existing adjacent ground. The Kansas Department of Transportation shall confer with HINU/BIA representatives to develop and implement a vegetative planting scheme for the vacated 31st Street right-of-way.

3. Douglas County, Kansas shall vacate the section of 31st Street located on the HINU campus and shall relinquish its easement for the right-of-way to the United States of America.

4. The Kansas Department of Transportation shall relocate Haskell Avenue approximately 1,000 feet east of its present location and Louisiana Street approximately 2,500 feet west of its present location for those sections of the roads located adjacent to that portion of the HAFP located in Baker Wetlands (See Attachment A). The Kansas Department of Transportation shall remove the abandoned sections of Haskell Avenue and Louisiana Street and grade the right-of-ways to approximate the contours/elevations of the existing adjacent ground. The Kansas Department of Transportation shall ensure that approximately 304 acres of mitigation wetlands will be developed in the areas created between the relocated and vacated roads (See Attachment A). The Kansas Department of Transportation shall convey a conservation easement in accordance with K.S.A. 58-3810, et. Seq., on the approximately 304 acre wetland mitigation area, to limit its future use to that consistent with this agreement, prior to a transfer of the property to a second party.

5. The Kansas Department of Transportation shall ensure that the width of the roadway corridor within the HAFP is the minimum necessary to accommodate the eventual construction of a four-lane Kansas Highway 10 bypass and relocation of 31st Street with four lanes. The Kansas

Department of Transportation shall ensure that the roadways, medians between opposing lanes, and the roadway shoulders are the minimum width necessary to satisfy highway transportation safety standards in order to minimize the adverse impact of the roadway corridor on the HAFP.

6. The Kansas Department of Transportation shall construct a 12-foot-high wall (as measured from the roadway surface) along the north side of the highway bypass and a 6-foot-high wall located on a 6-foot-high berm (the top of the wall will be located 12 feet above the roadway surface) on the south side of the bypass along that portion of the bypass located within the HAFP to minimize traffic noise and visual disturbance in areas outside the bypass corridor (See Attachment B). The walls shall be painted/tinted to blend with the background and shall be screened with vegetative plantings to obscure their presence from areas outside the roadway corridor.

7. The Kansas Department of Transportation shall develop and implement a plan to minimize construction-related impacts to the HAFP. The plan must be approved by KCD and shall be incorporated into the special conditions of KCD's Section 404 authorization for the undertaking. All construction equipment shall be either low ground pressure types or be required to operate on log mats. No grubbing will be allowed within the HAFP (cutting woody vegetation will be allowed). No staging areas or lay down yards will be located in the HAFP. Construction of the roadway embankment within the HAFP will be limited to 300-meter-long sections at any one time.

8. The Kansas Department of Transportation shall ensure that the final roadway design will minimize adverse impacts to the HAFP, to the maximum extent practicable. The Kansas Department of Transportation shall also ensure that the final roadway design will avoid the historic east-west dike and drainage canal located immediately south of the existing 31st Street between Haskell Avenue and Louisiana Street, all historic water control gate structures, and all historic bridges within the HAFP.

9. The Kansas Department of Transportation shall document the HAFP features impacted by the undertaking by preparing a permanent record of the features through use of photographs, detailed drawings, and narrative, as appropriate. The Kansas Department of Transportation shall consult with and take direction from the SHPO to ensure preparation of a complete record.

10. If the Kansas Department of Transportation determines that lighting is required for traveler safety within that portion of the undertaking located within the HAFP, it shall limit such lighting to the minimum necessary to ensure traveler safety and shall install such lighting in a manner that will minimize impacts to areas outside the roadway corridor.

11. The Kansas Department of Transportation shall monitor construction activities and shall inform all contractors to be alert to the potential for the discovery of cultural resources. If artifacts or previously unidentified archaeological sites are encountered, or if the undertaking will result in unanticipated effects to an existing historic property, KDOT shall stop construction activities that have a potential to impact such properties and shall immediately notify KCD and the SHPO that such action has taken place. In the event of such notification, KCD will consult

with the SHPO and other interested parties, as necessary, to determine an appropriate course of action.

12. If human remains are discovered, all work within the area of discovery shall stop immediately, the area shall be protected from further disturbance, and local law enforcement and the State Archaeologist shall be contacted immediately, in accordance with the Kansas Unmarked Burial Sites Preservation Act (K.S.A. 75-2741 through 75-2754). In the event of a discovery of human remains KDOT shall comply with all provisions of the Unmarked Burial Sites Preservation Act.

13. The Kansas Department of Transportation shall invite all Kansas reservation tribes to provide a representative to monitor all project-related excavation activities within the HAFP for the inadvertent discovery of unmarked burials. The Kansas Department of Transportation shall also accommodate any Federally-recognized tribe that wishes to monitor excavation activities within the HAFP. The Kansas Department of Transportation shall have the right to limit the number of tribal monitors on the construction site to a total of five, at any given time, and to impose such additional safety restrictions on monitors as it deems appropriate. Nothing in this stipulation shall require construction activities to be delayed due to the inability of monitors to be present on site during excavation activities.

14. This MOA will be null and void if Section 404 authorization is not granted for the undertaking.

15. This MOA will be terminated after construction of the undertaking has been completed for that portion of the project located in the HAFP, and when all mitigation stipulated in this agreement and any related mitigation stipulated in a Section 404 permit issued for the undertaking have been completed.

16. Should any signatory or invited signatory to this MOA object, in writing, to the manner in which the terms of this MOA are being implemented, KCD shall consult with the objecting party to resolve the issue. If KCD determines, within 30 days of the objection, that such objection cannot be resolved, KCD shall:

A. Forward all documentation relevant to the dispute to the Council. Within 30 days of receipt of adequate documentation, the Council shall review and advise KCD on the resolution of the objection. Any comments provided by the Council and all comments from the signatories and invited signatories to the MOA will be taken into account by KCD in reaching a final decision regarding the dispute.

B. If the Council does not provide comments regarding the dispute within 30 days after receipt of adequate documentation, KCD may render a decision regarding the dispute. In reaching its decision, KCD shall take into account all comments from the signatories and invited signatories to the MOA.

C. The Kansas City District's responsibility to carry out all other actions subject to the

terms of this MOA, that are not the subject of the dispute, will remain unchanged. The Kansas City District shall notify all signatories and invited signatories, in writing, of its decision relating to that portion of the agreement in dispute prior to implementation of its decision. The Kansas City District's decision will be final.

17. If any signatory or invited signatory to this MOA determines that the terms of this agreement cannot be or are not being carried out, that party shall immediately consult with the other signatories and invited signatories to develop an amendment to this MOA pursuant to 36 CFR 800.6(c)(7) and 800.6(c)(8). The amendment will be effective on the date a copy signed by all of the original signatories and invited signatories is filed with the Council. If the signatories and invited signatories cannot agree to appropriate terms to amend the MOA, any signatory or invited signatory may terminate the agreement in accordance with Stipulation 18, below.

18. If this MOA is not amended following the consultation procedures set out in Stipulation 17, above, it may be terminated by any signatory or invited signatory. If this agreement is terminated KCD shall either execute a memorandum of agreement with signatories and invited signatories under 36 CFR 800.6(c)(1) or request comments from the Council under 36 CFR 800.7(a) and proceed accordingly.

19. Execution of this MOA by KCD, SHPO, Council, KDOT, Douglas County, and Baker University, and the submission of documentation and filing of this MOA with the Council pursuant to 36 CFR 800.6(b)(1)(iv) prior to KCD's issuance of Section 404 authorization for the undertaking, and implementation of its terms evidence that KCD has taken into account the effects of this undertaking on historic properties and afforded the Council an opportunity to comment.

SIGNATORIES:

U.S. Army, Corps of Engineers, Kansas City District

_____ Date 5-1-03
Donald R. Curtis, Jr., Commander

Kansas State Historical Society

_____ Date 05-01-03
Mary R. Allman, State Historic Preservation Officer

Advisory Council on Historic Preservation

_____ Date 6/20/03
John M. Fowler, Executive Director

INVITED SIGNATORIES:

Douglas County, Kansas

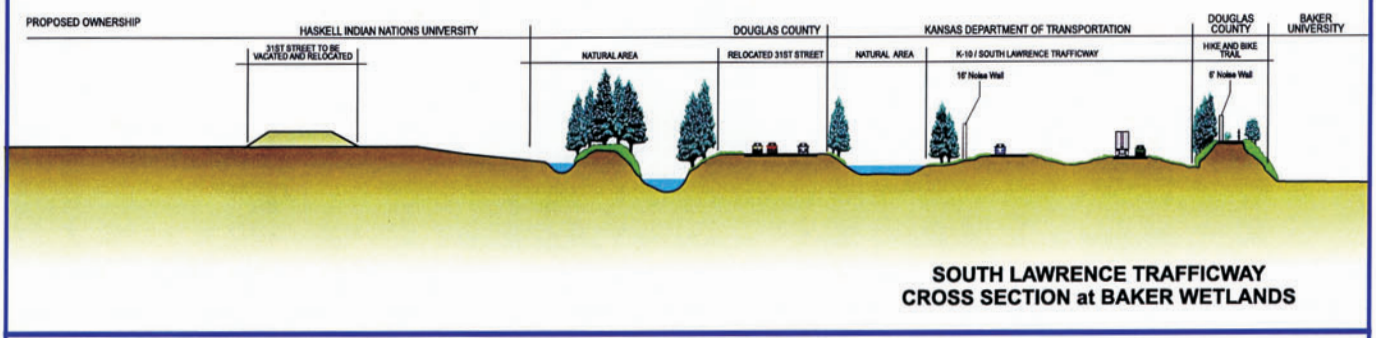
_____ 05-01-03 Date
Bob Johnson, County Commission Chairman

Baker University

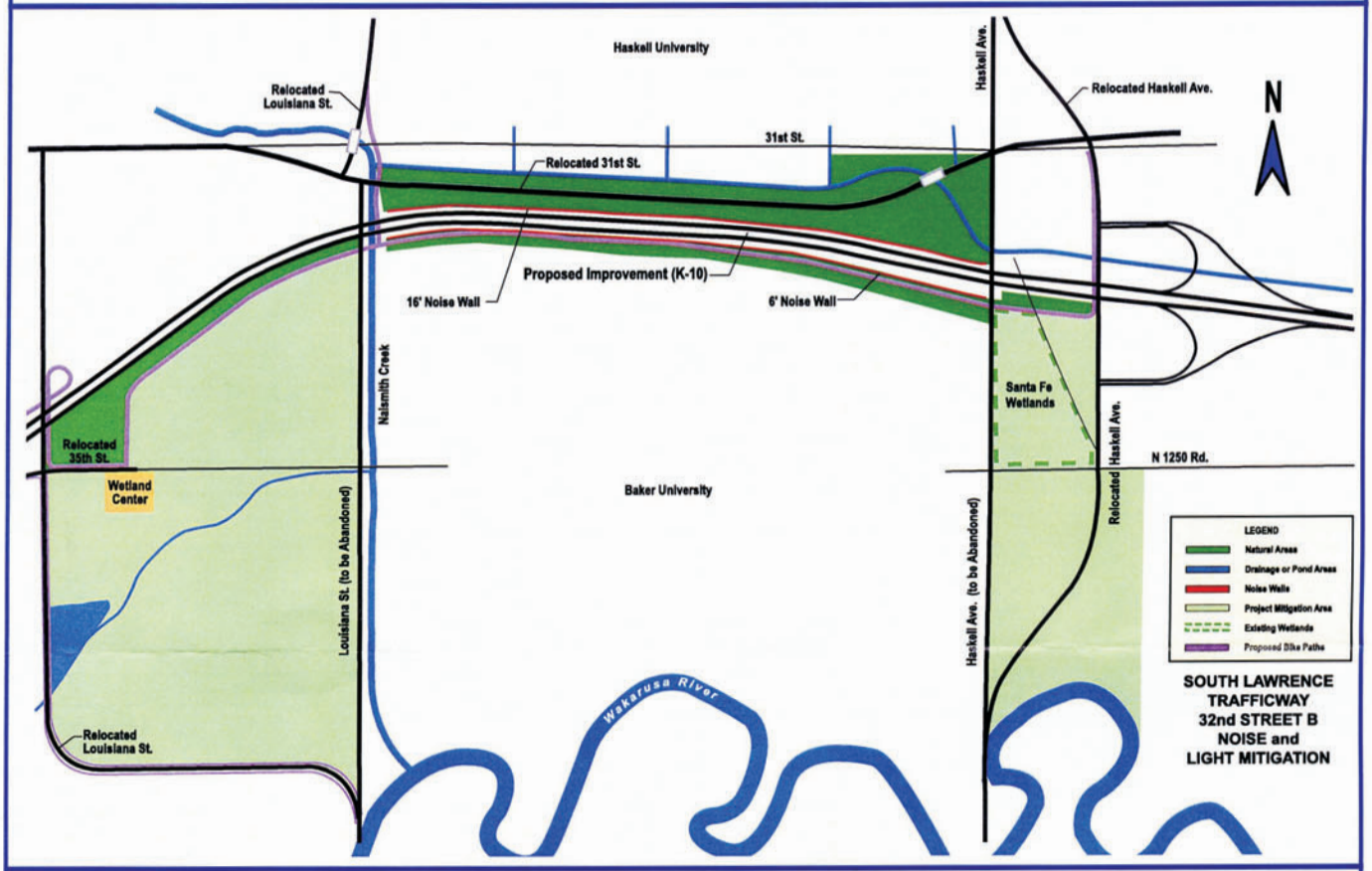
_____ 5-1-03 Date
Dr. Daniel M. Lambert, President

Kansas Department of Transportation

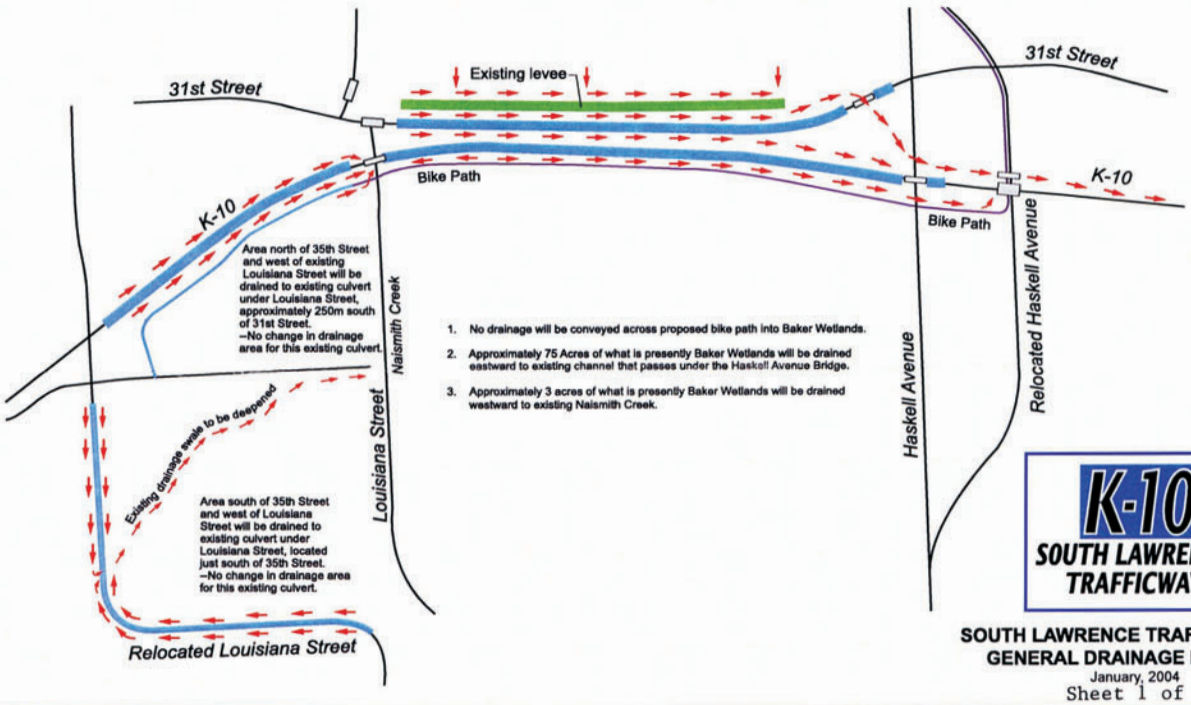
_____ 5-12-03 Date
Debra L. Miller, Secretary of Transportation



SOUTH LAWRENCE TRAFFICWAY
CROSS SECTION at BAKER WETLANDS



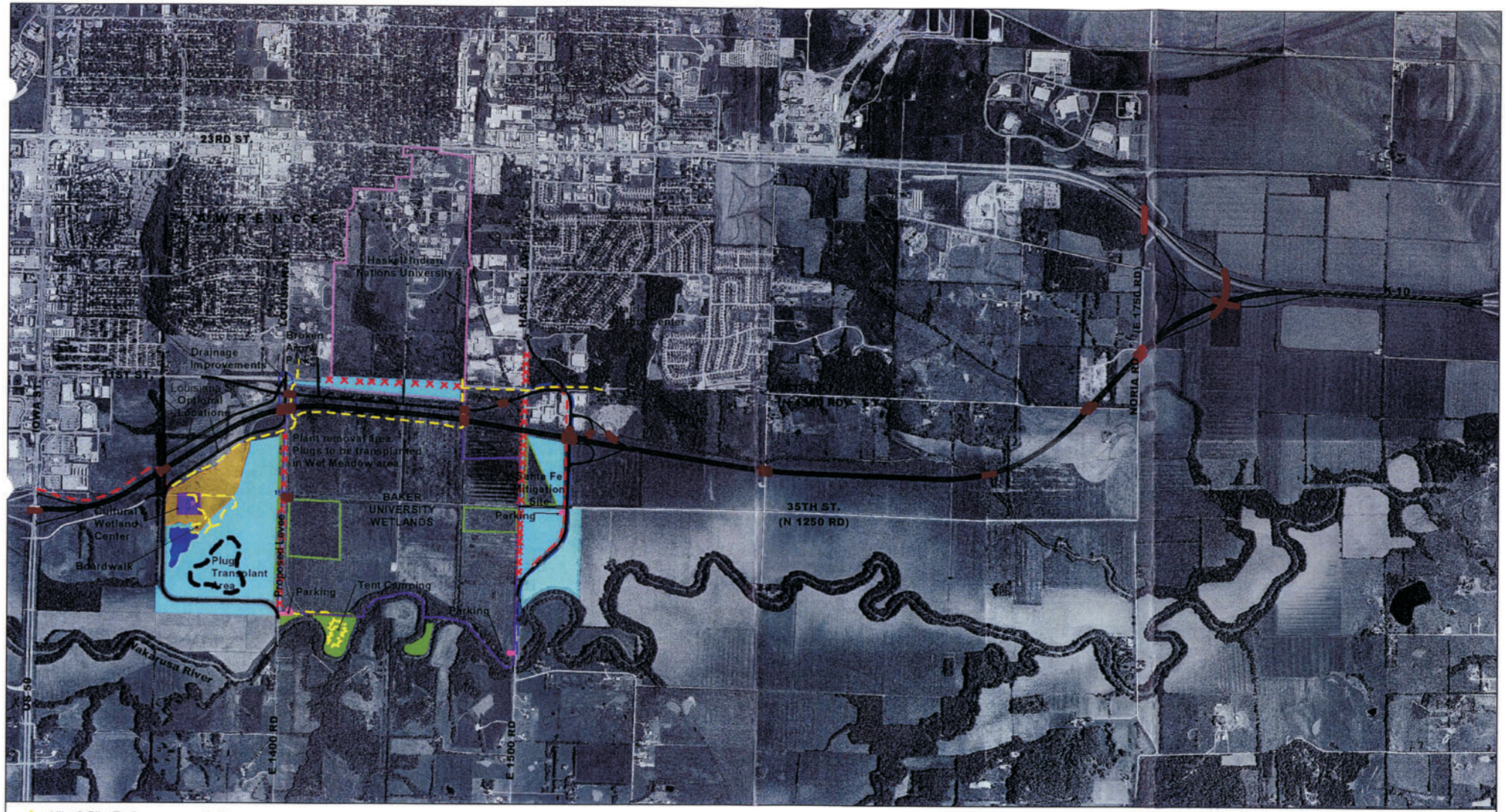
SOUTH LAWRENCE TRAFFICWAY
32nd STREET B
NOISE and LIGHT MITIGATION



1. No drainage will be conveyed across proposed bike path into Baker Wetlands.
2. Approximately 75 Acres of what is presently Baker Wetlands will be drained eastward to existing channel that passes under the Haskell Avenue Bridge.
3. Approximately 3 acres of what is presently Baker Wetlands will be drained westward to existing Naismith Creek.

K-10
SOUTH LAWRENCE TRAFFICWAY

SOUTH LAWRENCE TRAFFICWAY
GENERAL DRAINAGE PLAN
January, 2004
Sheet 1 of 2



- Hike & Bike Trail
- Trail Right-of-Way
- Tallgrass Prairie
- Wet Meadow
- Riparian Woodland
- Open Water
- Cultural & Wetland Center
- Parking Area
- Virgin Wet Prairie
- 32nd Street Alignment B
- Anticipated Bridge Locations
- Proposed Levee
- Water Line Replacement
- Water Control Structure
- Street Removal
- Baker University Wetlands
- Haskell University Property
- Santa Fe Mitigation Site

Mitigation Plan for the
32nd Street Alignment B

2000 0 2000 4000 Feet

N

This Proposed Mitigation Plan prepared by KDOT is based on information provided (to date) by interested parties and is subject to approval by the Corps of Engineers in conjunction with the issuance of Corps of Engineers Permits.

SOUTH LAWRENCE TRAFFICWAY / K-10

K-10 SOUTH LAWRENCE TRAFFICWAY

HNTB

Mitigation Plan
32nd Street Alignment B

January, 2004

Sheet 2 of 2

APPENDIX D

Kansas State Historic Preservation Office and Keeper of National Register's Coordination

KSR&C No. 06-09-147

KANSAS

Kansas State Historical Society
Cultural Resources Divison

KATHLEEN SEBELIUS, GOVERNOR

March 13, 2007

Scott P. Vogel
Chief, Environmental Services Section
Kansas Department of Transportation
Eisenhower State Office Building
700 S.W. Harrison Street
Topeka, KS 66603-3754

RE: 10-23 K-8392-01
South Lawrence Trafficway
Douglas County
Determination of Effect – William Meairs Farmstead

Dear Mr. Vogel:

In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed the screening plan proposed for the William Meairs Farmstead south of Lawrence in Douglas County. It is our understanding that natural screening (as presented in the aerial photograph which accompanied your letter dated February 21, 2007) will be put in place to shield the Meairs home should the 42nd Street Alignment A alternative of the South Lawrence Trafficway be chosen for construction. We note that the structure identified as "Meairs Residence" on the aerial photograph is actually a newer house belonging to one of Mr. Meairs' relatives. The historic Meairs home is situated immediately to the north. Nevertheless, we believe that the natural screening plan as proposed is sufficient to satisfy our concerns regarding this property and if implemented will be sufficient grounds for a designation of conditional no adverse effect.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Tim Weston at 785-272-8681 (ext. 214).

Sincerely,

Jennie Chinn, Executive Director and
State Historic Preservation Officer

Patrick Zollner
Deputy SHPO

6425 SW Sixth Avenue • Topeka, KS 66615-1099
Phone 785-272-8681 Ext. 240 • Fax 785-272-8682 • TTY 785-272-8683
www.kshs.org

United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, D.C. 20240

IN REPLY REFER TO:

DETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places
National Park Service

Project Name: Kansas Highway 10

Location: Douglas County **State:** Kansas

Request submitted by: Joseph S. Hughes, Chief, Regulatory Branch, Operations Division, Army, Corps of Engineers, Kansas City District

Date received:03/20/03 **Additional information received:**

		Eligibility	
Name of property	**SHPO opinion**	**Secretary of the Interior's opinion**	**Criteria**
Haskell Agricultural Farm Property	E	Additional Documentation Approved Eligible	A

Based on the documentation provided the boundaries of the Haskell Agricultural Farm Property are corrected to reflect the full extent of the lands historically associated with Haskell Institute's outlying agricultural property. This amendment to the Keeper's November 7, 2002 determination of eligibility represents a correction of a technical error in the site maps provided with the original determination request, and specifically includes two parcels identified as property owned by the University of Kansas and the Kansas Department of Wildlife and Parks. [See the attached revised boundary map.]

Clarification: On November 7, 2002 the Keeper's office determined that the following *individual resources* were either listed in or eligible for listing in the National Register: Pocahontas Hall, Pushmataha Hall, Bandstand, Tecumseh Hall, Hiawatha Hall, Auditorium, Haskell Arch, Haskell Stadium, Old Dairy Barn/Warehouse, Powhatan Hall, Kiva Hall, Haskell Indian Cemetery, and the Haskell Agricultural Farm Property (as noted above). The Keeper also determined that the Haskell Institute Historic District as proposed in the Corps of Engineers' report was not eligible for listing, because it lacked integrity.

for Keeper of the National Register

Date: 4/23/03

WASO-27

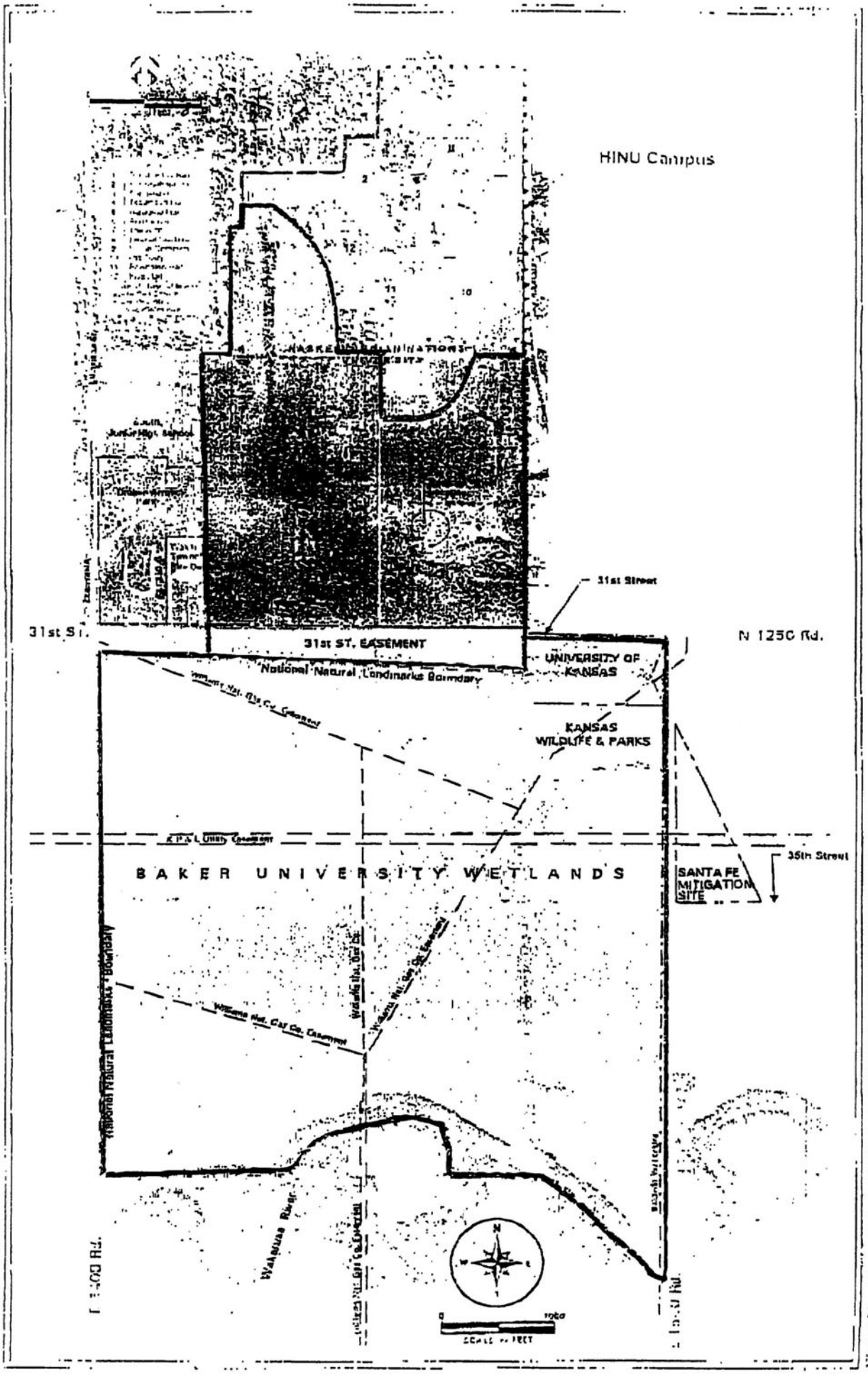


Figure 37. Proposed Haskell Indian Nations University and Haskell Farm Historic District

United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, D.C. 20240

IN REPLY REFER TO: 2280

To: Donald R. Curtis, Jr.
Colonel, Corps of Engineers
District Engineer
Kansas City District
700 Federal Building
Kansas City, MO 64106-2896

The Director of the National Park Service wishes to inform you of our determination pursuant to the National Historic Preservation Act, as amended, and Executive Order 11593 in response to your request for a determination of eligibility for inclusion in the National Register of Historic Places. Our determination appears on the enclosed material.

As you know, your request for our professional judgment constitutes a part of the Federal planning process. We urge that this information be integrated into the National Environmental Policy Act analysis and the analysis required under section 4(f) of the Department of Transportation Act, if this is a transportation project, to bring about the best possible program decisions.

This determination does not serve in any manner as a veto to uses of property, with or without Federal participation or assistance. The responsibility for program planning concerning properties eligible for the National Register lies with the agency or block grant recipient after the Advisory Council on Historic Preservation has had an opportunity to comment.

Attachment

United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, D.C. 20240

IN REPLY REFER TO:

DETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places
National Park Service

Project Name: Kansas Highway 10

Location: Douglas County **State:** Kansas

Request submitted by: Donald R. Curtis, Jr., Colonel, Corps of Engineers, District Engineer, Kansas City District, Department of the Army

Date received: 10/29/02 **Additional information received:**

Name of property	SHPO opinion	Eligibility: Secretary of the Interior's opinion	Criteria
Haskell Institute Historic District (As proposed in this documentation under NR Criterion A)	E	NE (see comments for a list of individual resources eligible under NR Criterion A)	A
Haskell Institute Historic District (TCP)	NE	NE	
Haskell Agricultural Farm Property	-	E	A

See Attached Comments

for Keeper of the National Register

Date: 11/7/02

WASO-27

Project Name: Kansas Highway 10

Location: Douglas County **State:** Kansas

Request submitted by: Donald R. Curtis, Jr., Colonel, Corps of Engineers, District Engineer, Kansas City District, Department of the Army

Date received: 10/29/02 **Additional information received:**

Based on the documentation provided, the *Haskell Institute Historic District* as proposed in the report presented by the Corps of Engineers is not eligible for listing in the National Register. The proposed district lacks sufficient integrity to merit listing. As a result of the considerable building construction and modernization efforts undertaken at the school in the post 1940 period only a limited number of isolated resources remain on the school campus to convey the historic significance of the nationally important Haskell School from the period 1884-1940. The intrusion of so many "modern" resources results in a lack of visual continuity and negatively affects the ability of the larger campus to convey a historic sense of time and place.

The National Register has determined that the following individual resources are either listed in or eligible for listing in the National Register of Historic Places under National Register Criterion A in the areas of Education, Ethnic History-Native American, Politics/Government, and Social History. These findings, with the addition of the school's agricultural farm lands, are consistent with the findings of the National Historic Landmark designation process undertaken for Haskell Institute in the 1980s. The following resources are already listed in the National Register of Historic Places because they are included in the Haskell Institute National Historic Landmark:

Name
Pocahontas Hall
Pushmataha Hall
Bandstand
Tecumseh Hall
Hiawatha Hall
Auditorium
Haskell Arch
Haskell Stadium
Old Dairy Barn/Warehouse
Powhatan Hall
Kiva Hall
Haskell Indian Cemetery

In addition the Haskell Agricultural Farm Property, including the Upper Fields campus [N of 31st Street] and Baker Wetlands [S of 31st Street], is eligible for listing in the National Register of Historic Places under Criterion A.

The approach is similar to a National Register multiple property submission (MPS) for the "Historic Resources Associated with the Haskell Institute, 1884-1940." Such an approach eliminates the considerable number of non-historic elements that comprise the current school campus and focuses instead on the few extant historic resources that can directly convey the historic significance of the nationally important school. The former agricultural farm property (Upper Fields and Baker Wetlands) is important because it reflects the essential role of agricultural training in the early history of the Haskell School and the diverse historic uses of the lands to the south of the core campus. While modified, these former agricultural lands still retain the essential physical characteristics associated with this area from the historic period, including land use patterns, spacial organization, circulation networks, and small scale elements such as the various water control systems and structures.

The National Register has determined that the Haskell Institute Historic District is not eligible for listing in the National Register as a traditional cultural property under Criterion A. The current documentation lacks sufficient information and justification for consideration of the school property as a historic traditional cultural property.

Boundaries:
The boundaries for the previously listed properties remain identical to those established in the 1986 NHL documentation. The recommended boundaries for the eligible agricultural fields are identified on the attached map and reflect the historic extent of the former agricultural areas associated with the Haskell Institute omitting only those areas containing substantial non-historic construction (North and South Winnemucca Hall, Haskell Health Center, etc.). Specifically, the northern boundary is defined by E. Perimeter Road, Barker Avenue and Kiowa Avenue, and West Perimeter Road.

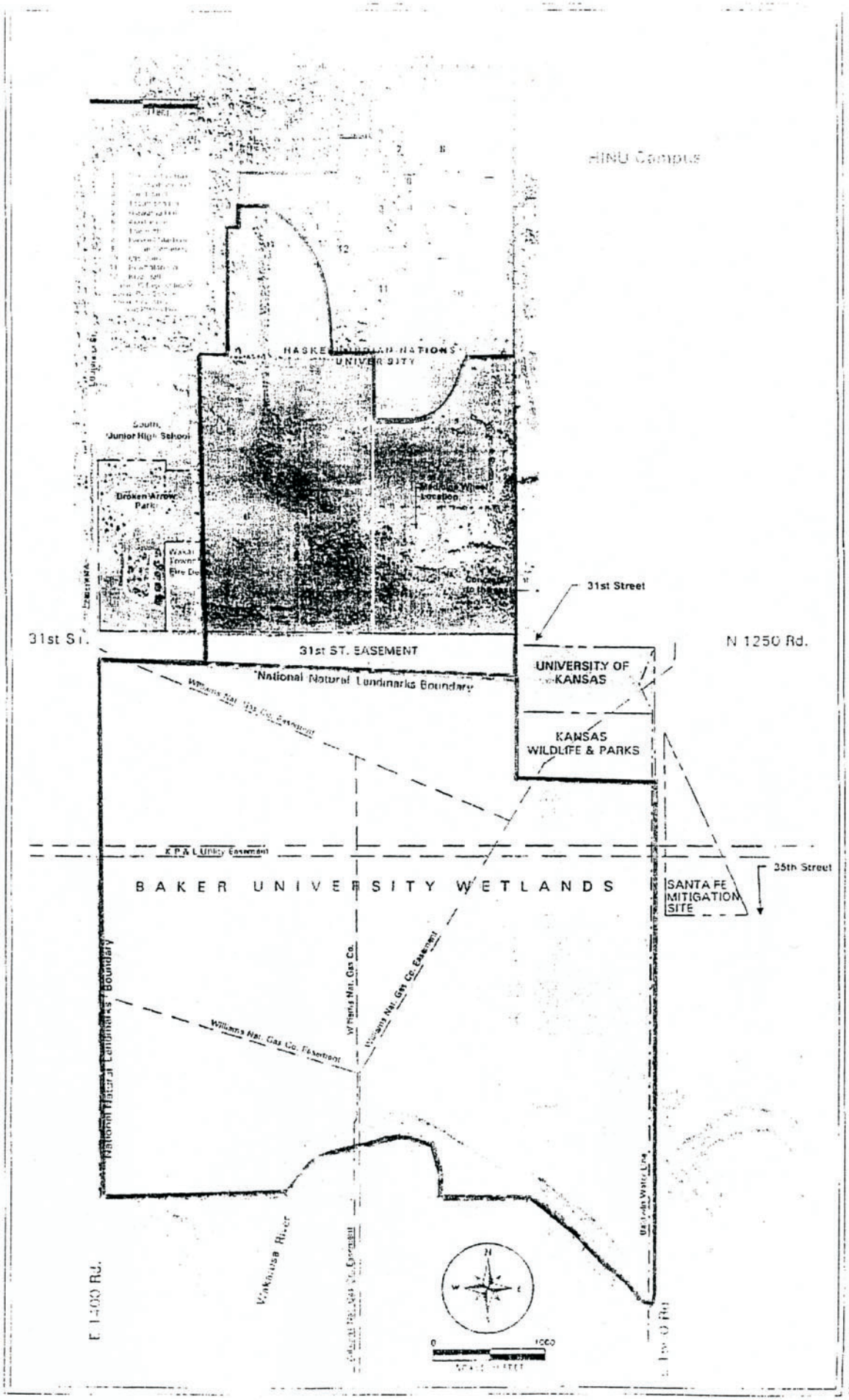
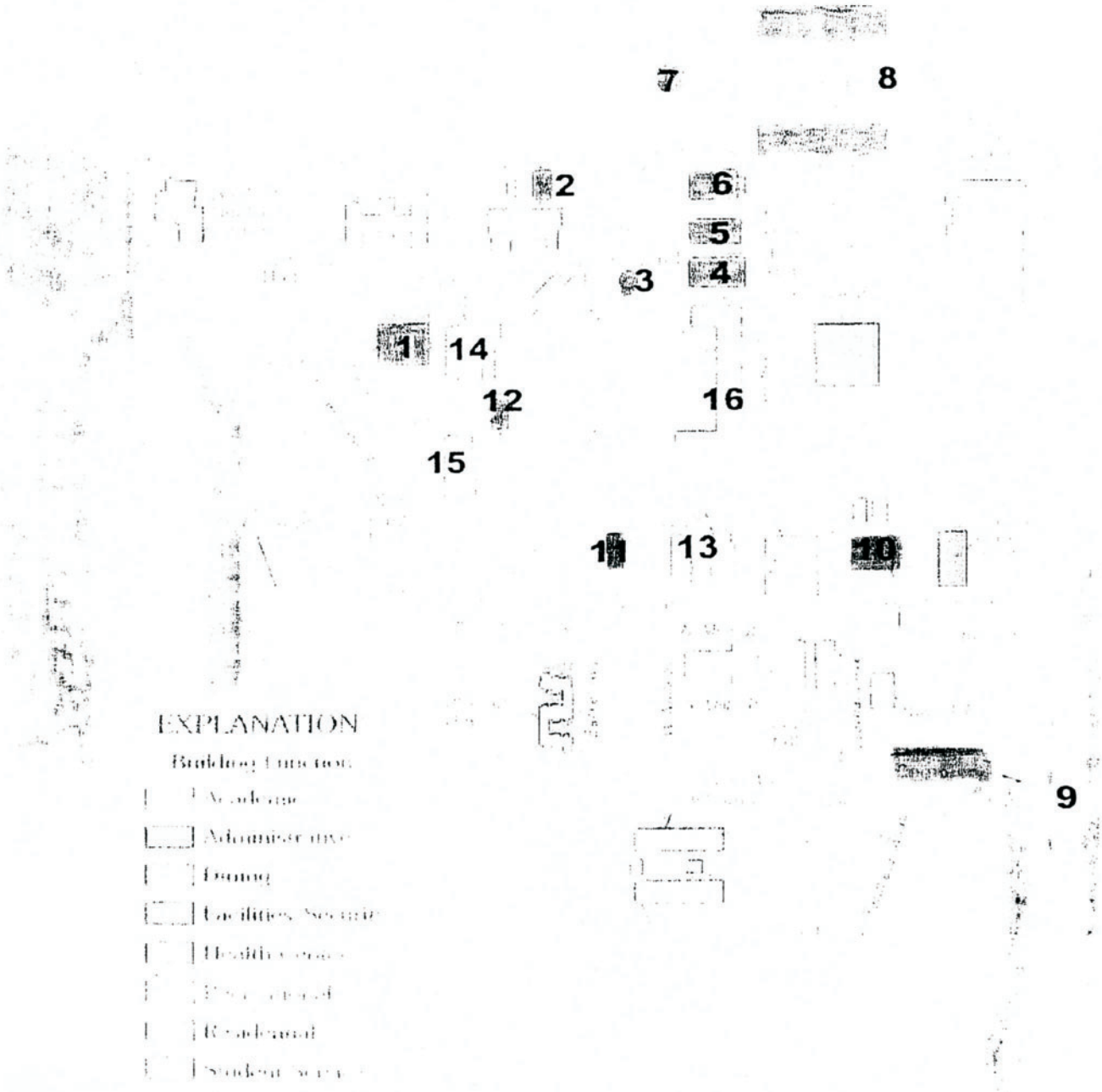


Figure 17. Proposed Haskell Indian Nations University and Haskell Farm Historic District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EXPLANATION
Building Functions
Academic
Administrative
Dining
Facilities Services
Residential

KANSAS

STATE

HISTORICAL

SOCIETY

◆

Historic Preservation Office

◆

6425 S.W. 6th Avenue
Topeka, Kansas
66615-1099
PHONE# (785) 272-8681
FAX# (785) 272-8682
TTY# (785) 272-8683

◆

KANSAS HISTORY CENTER

Administration
Center for Historical Research
Cultural Resources
Education / Outreach
Historic Sites
Kansas Museum of History
Library & Archives

HISTORIC SITES

Adair Cabin
Constitution Hall
Cottonwood Ranch
First Territorial Capitol
Fort Hays
Goodnow House
Grinter Place
Hollenberg Station
Kaw Mission
Marais des Cygnes Massacre
Mine Creek Battlefield
Native American Heritage Museum
Pawnee Indian Village
Pawnee Rock
Shawnee Indian Mission

April 22, 2002

Scott P. Vogel
Chief, Environmental Services Section
Department of Transportation
Docking State Office Building
Topeka, KS 66612

RE: 10-23 K-8392-01
South Lawrence Trafficway, Douglas County
32nd Street Alignment Archeological Survey

Dear Mr. Vogel:

Our office has received and reviewed the letter report prepared by Dr. Tim Weston (April 18, 2002) detailing the pedestrian and shovel testing survey of the 32nd Street alignment of the proposed South Lawrence Trafficway. This survey did not locate any cultural materials or evidence of human burials. We concur with the report's recommendation that no additional archeological investigations are necessary for the proposed 32nd Street alignment. If this alignment is chosen, the effect that it would have on the Baker Wetlands [determined eligible by the Kansas State Historic Preservation Officer (12/27/2001)] will need to assessed. However, it does not appear that any additional cultural properties would be affected by the 32nd Street alignment.

Sincerely,

Jennie Chinn
Acting State Historic Preservation Officer

Richard Pankratz

Richard Pankratz, Director
Historic Preservation Office

5100p ✓

RECEIVED

APR 24 2002

BUREAU OF DESIGN
ADMINISTRATION

Des. Engr / Road / Bridge / Contracts | Coord. Sec. / Envir. Ser. / Landscape / Bul. Bd. / File

APPENDIX E
Draft 4(f) Evaluation Comment Letters

APPENDIX E
List of Comment Letters

APPENDIX E-1
Federal Comments

U.S. Department
of Transportation
Federal Highway Administration
Kansas Division

6111 SW 29th Street, Suite 100
Topeka, Kansas 66614-4271

November 8, 2006

Project 10-23 K-8392-01
South Lawrence Trafficway
Douglas County, Kansas
Draft Section 4(f) Evaluation

To whom it may concern:

Enclosed is a copy of the approved Draft Section 4(f) Evaluation for the South Lawrence Trafficway, located in Lawrence, Kansas. We are providing this copy for your review and comment. Please submit any comments you may have by January 5, 2007, and they will be considered in development of the Final Section 4(f) Evaluation.

A public meeting will be held to display maps and other pertinent information and to gather public comments. The meeting will be held in an open house format, allowing interested persons to attend at their convenience. No formal presentations will be made. A court reporter will be available to accept verbal comments for the official record. Written comments also will be accepted. The public meeting will be held on Thursday, December 14, 2006 from 10:00 a.m. to 7:00 p.m. at the Kansas Army National Guard Armory, 200 Iowa Street, Lawrence, Kansas.

The Draft Section 4(f) Evaluation is also available at the Kansas Department of Transportation's (KDOT) Project Information Portal located at www.ksdot.org/projects/search.asp and clicking on the South Lawrence Trafficway link. Also, the South Lawrence Trafficway Final Environmental Impact Statement was released by the U.S. Army Corps of Engineers on January 6, 2003 and copies are available in CD-ROM format by contacting KDOT, Bureau of Design, at 785-296-3901 or 1-877-550-5368.

If you have any questions or concerns, please contact Wendall L. Meyer, Assistant Division Administrator, at 785-228-2544.

Sincerely yours,

Wendall J. Meyer

ichael Bowen, P.E.
ision Administrator

Date November 16, 2006

✓ No Concerns/No Comment

Signed Michael J LeValley

Michael J. LeValley
Field Supervisor
U.S. Fish and Wildlife Service
Kansas Ecological Services Field Office

Eisenhower Interstate System

BUCKLE UP AMERICA

United States Department of the Interior

NATIONAL PARK SERVICE
National Trails System – Salt Lake City
324 South State Street, Suite 200
Box 30
Salt Lake City, Utah 84111

IN REPLY REFER TO:

December 1, 2006

Wendall L. Meyer
Assistant Director, Administration
Federal Highway Administration, Kansas Division Office
61111 Southwest 29th Street
Topeka, KS 66614

Dear Mr. Meyer:

I recently learned that planning for the South Lawrence Trafficway project has resumed. Since 2001, it has been a concern of the National Trails System, National Park Service, due to trail resources in the project area related to the Oregon and California National Historic Trails.

In 1978, Congress authorized the Oregon National Historic Trail and 1992 it authorized the California National Historic Trail. The National Park Service is the administrative agency for these two trails. Our responsibilities include protection of trail resources and interpretation of the trails.

In November of 1999, a *Comprehensive Management and Use Plan and Environmental Impact Statement* was completed, and the Record of Decision filed. The trail management plan identifies the "high potential sites" related to the two trails. In close proximity to the South Lawrence Trafficway project area are two such sites. They are the Upper Bluejacket Crossing of the Wakarusa River and the Upper Wakurusa Crossing/Blanton's Bridge. The alternative of the 42nd Street alignment appears nearest to the Upper Wakarusa Crossing/Blanton's Bridge location.

These sites are identified as part of the requirement by the National Trails System Act (1968). They evoke a sense of the 19th century period of trail use, are well known and of tremendous interest to trail aficionados in Kansas and across the nation, and contribute to the national historic significance of the trails. The National Park Service urges protection of these important trail resources.

Please include this office of the NPS National Trails System as an interested party in the planning effort for the trafficway. We are pleased to enclose a copy of the trails management plan for your planning purposes.

For further information and assistance, please contact Cultural Resources Specialist Lee Kreutzer, of our Salt Lake City office, at (801)-741-1012 ext. 118 or via email at lee_kreutzer@nps.gov.

Sincerely,

Jere L. Krakow

Jere L. Krakow
Superintendent

cc: Dave Welch, National Preservation Officer, Oregon-California Trails Association

enclosure

Congress of the United States

Washington, DC 20510

December 19, 2006

Mr. Wendall L. Meyer
Assistant Division Administrator
Federal Highway Administration
Kansas Division Office
6111 SW 29th Street

Dear Mr. Meyer:

We write to comment on the Federal Highway Administration's (FHWA) Draft Section 4(f) Evaluation of improvements to the K-10 South Lawrence Trafficway (SLT), specifically the 32nd Street alternative. We believe the 32nd Street alternative is the only feasible and prudent plan to address the region's safety and transportation needs.

The Kansas Department of Transportation (KDOT), US Army Corps of Engineers (USACE) and FHWA recognize that the current location of K-10 through city streets in Lawrence creates congestion, added pollution and higher crash rates for Lawrence. Additionally, the current alignment of K-10 negatively affects the regional transportation system connecting Topeka, Lawrence and Johnson County. In 2003 the USACE selected the 32nd Street alternative with the accompanying mitigation package as the most prudent option for completion of the SLT. This package addresses important transportation needs in the state's fastest growing region; needs that have been the topic of debate and planning for decades.

The time has long come to move forward with this project in a way that addresses the state's safety, efficiency and environmental concerns. The 32nd Street alternative achieves these goals. USACE, KDOT, the Kansas State Historic Preservation Officer, Baker University, Douglas County and the Advisory Council on Historic Preservation agreed on a mitigation package that protects the environment by creating a net increase of 259 acres of wetlands. Such an agreement does not exist for the 42nd Street alternative. Additionally, the 32nd Street alternative is projected to cost $52.7 million less than the 42nd Street alternative. While the cost should not be the sole determining factor of the project's location, it most certainly is significant when considering the feasibility of the project and appropriate use of taxpayer dollars.

Failure to take any action will not solve the safety and traffic concerns along K-10 and does not address future growth concerns. Furthermore, the 42nd Street alternative lacks fiscal restraint, the generous mitigation package and according to USACE "will result in greater long-term cumulative adverse impacts to Baker Wetlands." In evaluating the three main alternatives, we find the only feasible and prudent alternative is to complete the SLT according to the 32nd Street package.

Sincerely,

Sen. Pat Roberts

Sen. Sam Brownback

Rep. Jim Ryun

Rep. Todd Tiahrt

Rep. Jerry Moran

United States Department of the Interior
OFFICE OF THE SECRETARY
Washington, DC 20240

TAKE PRIDE IN AMERICA

MAY 3 2007

ER 06/1096

Mr. Wendall L. Meyer
Assistant Division Administrator
Federal Highway Administration
6111 SW 29th Street, Suite 100
Topeka, Kansas 66614-4271

Dear Mr. Meyer:

As requested, the Department of the Interior (Department) has reviewed the Draft Section 4(f) Evaluation for **Improvements to K-10 South Lawrence Trafficway, Douglas County, Kansas.** The Department offers the following comments and recommendations for your consideration.

Section 4(f) Comments:

This project has a long and tortuous history that is well documented in the draft Section 4(f) Evaluation. Essentially there are two properties that are considered under Section 4(f) of the Department of Transportation Act of 1966 (48 U.S.C. 1653(f)). The first property is described as the Haskell Agricultural Farm property, including all lands formerly associated with the Haskell Institute, or Haskell Indian Nations University, and the main campus of the University. This includes the Baker Wetlands, a functioning reconstructed wetlands complex north of the Wakarusa River and south of the University campus. The Section 4(f) Evaluation fails to identify the Baker Wetlands as a National Natural Landmark (NNL). The NNL Program recognizes and encourages the conservation of outstanding examples of our country's natural history. It is the only natural areas program of national scope that identifies and recognizes the best examples of biological and geological features in both public and private ownership. These properties are designated by the Secretary of the Interior, with the owner's concurrence. The National Park Service administers the program. The second property is the William Meairs Farmstead, a National Register of Historic Places eligible farmstead located south of the Wakarusa River.

A series of alternative actions designed to connect two ends of Kansas Highway 10 (K-10) on either side of Lawrence, Kansas, have been studied since 1964 by the Federal Highway Administration (FHWA), by the Kansas Department of Transportation (KDOT), and by the U.S. Army Corps of Engineers (COE). These alternatives have focused on

the existing street alignments, and have taken their names from these alignments. The final Environmental Impact Statement (EIS) prepared by the COE identified two viable alternatives, the 32nd Street Alignment B Alternative, and the 42nd Street Alignment A Alternative (or the South of the River Alternative). The COE determined the 32nd Street Alignment B Alternative was the selected alternative in the Record of Decision (ROD) in 2003. The FHWA intends to adopt this alternative as its selected alternative and issue its own ROD.

The differences between these two alternatives in terms of their impacts to Section 4(f) properties could not be more different. The selected alternative will be built through the Haskell Agricultural Farm property and the Baker Wetlands, causing direct impacts to the historic property and to the NNL. The roadway will be elevated and several mitigation pieces would be added to the project to enhance visitor access and appreciation of this natural area. However, the 42nd Street Alternative would avoid impacts to both properties, with the exception of a de minimus impact to the Meairs Farmstead. Following the direction of the *Overton Park* criteria (*Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402 (1972)) that suggests Section 4(f) lands are "...not to be lost unless there are truly unusual factors present...or...the cost of community disruption resulting from alternative routes reaches extraordinary magnitudes" the Department looked at each of the final two alternatives. The major thrust of the argument for the selected alternative appears to be the cumulative impacts associated with building the South of the River Alternative, but the arguments remain somewhat unconvincing. The cumulative impacts associated with threatened development seems somewhat hollow arguments since the area south of the river was included in the local land use planning documents in 2004. These areas south of the campus to south of the river are apparently classified the same, meaning the City of Lawrence anticipates development in these areas. Any of these areas are subject to the same development pressures.

On the other hand, the Department feels the direct impacts to resources from these alternatives seems to favor the alternative not selected, since it has less impacts to wetlands, less floodplain impacts, and less total stream involvement (greater number of crossings but fewer total linear feet of involvement). The selected alternative has nearly ten times the wetland impacts, but does impact less than half of the woodlands (both riparian and upland woodlands) as the other alternative.

Therefore, we would not concur with the first provision of Section 4(f); there appears to be a viable avoidance alternative. In terms of mitigation, the Department would agree that all possible planning needed to minimize potential harm to these resources have been employed. It simply comes down to the fact that the evaluation does not state with any clarity why the avoidance alternative is not viable (if not feasible or prudent) or what truly unusual factors or extraordinary magnitudes of community disruption would result from selecting the alternative that avoids (for the most part) impacts to Section 4(f) resources.

The Department has a continuing interest in working with the FHWA and KDOT to ensure that impacts to resources of concern to the Department are adequately addressed. For continued consultation and coordination with the issues concerning the Section 4(f) resources, please contact the Regional Environmental Coordinator Nick Chevance, Midwest Regional Office, National Park Service, 601 Riverfront Drive, Omaha, Nebraska 68102, telephone 402-661-1844.

We appreciate the opportunity to provide these comments.

Sincerely,

Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

U.S. Department of Transportation
Federal Highway Administration

Kansas Division

6111 SW 29th Street, Suite 100
Topeka, Kansas 66614-4271

May 24, 2007

Project 10-23 K-8392-01
South Lawrence Trafficway
Douglas County, Kansas
Department of Interior Comments on
Draft Section 4(f) Evaluation

Nick Chevance, Regional Environmental Coordinator
Midwest Regional Office
National Park Service
601 Riverfront Drive
Omaha, NE 68102

Dear Mr. Chevance:

We received a letter, dated May 3, 2007, from Willie R. Taylor, Director, Office of Environmental Policy and Compliance, United States Department of the Interior, with comments on our Draft Section 4(f) Evaluation for the South Lawrence Trafficway project. The comment period was extended for two weeks and ended on January 19, 2007. We appreciate you taking the time to comment on this project, and have carefully considered your comments in our decision-making process.

The Draft Section 4(f) Evaluation, Exhibit 4f-5, does delineate the National Natural Landmark Boundary. We will ensure that the Final Section 4(f) Evaluation briefly describes Baker University Wetlands as a National Natural Landmark and provides a clearer delineation of its boundaries. However, it is important to note that while the privately-owned Baker University Wetlands are designated a National Natural Landmark, this designation does not, in and of itself; invoke protection under Section 4(f) of the DOT Act of 1966.

Also, it is premature to conclude in the Draft Section 4(f) Evaluation that there are no feasible and prudent alternatives to the use of land from the Haskell Agricultural Farm Property and the proposed action includes all possible planning to minimize harm to the Haskell Agricultural Farm Property resulting from such use. FHWA's conclusions and determinations regarding the Haskell Agricultural Farm Property will be included in the Final Section 4(f) Evaluation, if appropriate.

If you have additional questions, please contact Mr. Wendall L. Meyer of my staff at 785-228-2544.

Sincerely yours,

J. Michael Bowen, P.E.
Division Administrator

MOVING THE AMERICAN ECONOMY

APPENDIX E-2
State Comments

Letter No. 105
KSR&C No. 06-12-059

KANSAS

Kansas State Historical Society
Jennie Chinn, *Executive Director*

KATHLEEN SEBELIUS, GOVERNOR

December 7, 2006

J. Michael Bowen, P.E.
Division Administrator
Federal Highway Administration
6111 SW 29th Street, Suite 100
Topeka, Kansas 66614-4271

RE: Project 10-23 K-8392-01
South Lawrence Trafficway
Douglas County, Kansas
Draft Section 4(f) Evaluation

Dear Mr. Bowen:

In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed the South Lawrence Trafficway Draft Section 4(f) document (dated November 2006) prepared by the Federal Highway Administration and the Kansas Department of Transportation. It is our understanding that the Federal Highway Administration proposes to adopt the final Environmental Impact Statement prepared during an earlier phase of the project by the U.S. Army Corps of Engineers, Kansas City District. At the conclusion of that process in 2003, our office signed a Memorandum of Agreement (MOA) with the Corps of Engineers and the Advisory Council on Historic Preservation. Invited signatories included Douglas County, Kansas, Baker University, and the Kansas Department of Transportation. That agreement, included with the Draft Section 4(f) document, satisfied our concerns regarding the project. Since no changes are being proposed, our office stands by the terms agreed to in the MOA.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Patrick Zollner at 785-272-8681 (ext. 217).

Sincerely,

Jennie Chinn

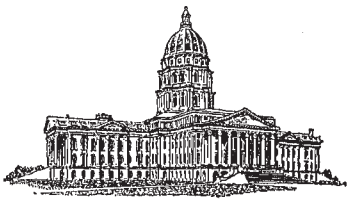
Jennie Chinn, Executive Director and
State Historic Preservation Officer

6425 SW Sixth Avenue • Topeka, KS 66615-1099
Phone 785-272-8681 Ext. 205 • Fax 785-272-8682 • Email jchinn@kshs.org • TTY 785-272-8683
www.kshs.org

ANTHONY R. BROWN
REPRESENTATIVE, 38TH DISTRICT
1229 ACORN STREET
EUDORA, KANSAS 66025
(785) 542-2293

300 SW 10TH AVE., ROOM 181-W
TOPEKA, KANSAS 66612-1504
(785) 296-7692
(1-800) 432-3924
brown@house.state.ks.us

STATE OF KANSAS



TOPEKA

HOUSE OF
REPRESENTATIVES

COMMITTEE ASSIGNMENTS
TAXATION
TRANSPORTATION
FINANCIAL INSTITUTIONS
ECONOMIC DEVELOPMENT

January 2, 2007

Mr. Wendall L. Meyer
Assistant Division Administrator
FHWA – Kansas Division Office
6111 SW 29th Street
Topeka, KS 66614

Dear Mr. Meyer,

The Kansas 38th District supports the Federal Highway Administration's adoption of the only feasible and prudent option: the 32nd Street alignment of the South Lawrence Trafficway. As a member of the Kansas House of Representatives, I recognize the regional benefit of constructing this section of highway. Currently, K-10 is routed through the city streets of Lawrence, creating congested and unsafe driving conditions. The South Lawrence Trafficway improvements will invite quality development and provide safe travel that benefits the entire northeast region of Kansas, the fastest growing area in the state.

The mitigation plan for the 32nd Street alignment provides regional benefits to the community by the construction of approximately 317 acres of wetlands. The 42nd Street alignment does not include a mitigation plan equal to that of the 32nd Street plan. Additionally, the 32nd Street option is the most fiscally responsible project. The 42nd Street would cost $52.7 million more to build than the 32nd Street plan. While cost is not the only reason the 32nd Street plan is more viable, it should not be ignored.

The Kansas 38th District requests your support of 32nd Street alignment of the South Lawrence Trafficway.

Sincerely,

Anthony R. Brown
Kansas House of Representatives, 38th District

KANSAS

DEPARTMENT OF WILDLIFE AND PARKS KATHLEEN SEBELIUS, GOVERNOR

January 5, 2007

Mr. Wendall L. Meyer
Assistant Division Administrator
Federal Highway Administration
Kansas Division Office
6111 SW 29th Street Suite 100
Topeka KS 66614-4271

Ref: D2.0202
Douglas
South Lawrence Trafficway
Track: 19920864

Dear Mr. Meyer:

We have reviewed the Draft Section 4(f) Evaluation for the South Lawrence Trafficway involving the proposed construction for K-10 – South Lawrence Trafficway in Section 13, Range 19 East, and Section 18, Range 20 East, all in Township 13 South in Douglas County. This project was re-reviewed for possible potential deleterious impacts on crucial wildlife habitats, current state-listed threatened / endangered species / species in need of conservation, and public recreation areas for which this agency has some administrative authority.

Through previous comments via formal meetings as well as written responses involving all the interested reviewing agencies, we feel we have previously voiced our environmental concerns towards this project's final design. Furthermore, since our prior correspondence the US Army Corps of Engineers has issued a 404 permit requiring special conditions which remains active through 2013. As such, at this time, we wish to make no further remarks towards its final completion. We remain to have no objections to either 32nd street or 42nd street alternative given they each would include the proper mitigation ratios. If our prior comments are requested, please contact this office.

Sincerely,

Bryan R. Simmons, Ecologist
Environmental Services Section

Pratt Operations Office
512 SE 25th Ave., Pratt, KS 67124-8174
Phone 620-672-5911 Fax 620-672-6020 www.kdwp.state.ks.us

APPENDIX E-3
County Comments

DOUGLAS COUNTY COMMISSIONERS
1100 Massachusetts Street
Lawrence, KS 66044-3064
(785) 832-5268 Fax (785) 832-5148
www.douglas-county.com

Bob Johnson
Charles Jones
Jere McElhaney

January 2, 2007

Wendall L. Meyer
Federal Highway Administration
6111 SW 129th Street, Suite 100
Topeka, KS 66614-4271

South Lawrence Trafficway
Section 4(F) Evaluation

Douglas County is a signatory to the mitigation plan for the completion of the South Lawrence Trafficway (SLT) on the 32nd Street alignment. Therefore, it is self evident that Douglas County favors the completion of the SLT and believes 32nd Street is the most prudent route.

From an environmental point-of-view, it does not seem feasible to consider a route that requires two crossings of the Wakarusa River. To spend an extra fifty-million taxpayers dollars does not appear to be a sensible alternative. This is especially true when the added expenditure would not improve the efficiency of the road and would in fact cause added expense to the traveling public.

It is our hope that you will agree with the work product of the U.S. Army Corps of Engineers and conclude that the most feasible and prudent route is 32nd Street.

Bob Johnson

Bob Johnson, Chairman
Douglas County Commission

RCJ:rmc

cc: Jere McElhaney
Charles Jones

APPENDIX E-4
City Comments

The City of Overland Park KANSAS

Office of the Mayor

Sister City of Bietigheim-Bissingen, Germany

City Hall • 8500 Santa Fe Drive
Overland Park, Kansas 66212
913/895-6000 • Fax 913/895-5003

www.opkansas.org

December 12, 2006

Wendell L. Meyer
Assistant Division Administrator
Federal Highway Administration (FHWA)
Kansas Division Office
611 SW 29th Street
Topeka, KS 66614

Dear Mr. Meyer:

On behalf of the City of Overland Park, I urge you to support the 32nd Street South Lawrence Trafficway (SLT) alternative with the mitigation package. Based on the Corps of Engineers and FHWA analysis of multiple routes and a no build option, I believe the 32nd Street route is the only feasible and prudent option to alleviate traffic and safety concerns while protecting and enhancing the wetlands.

Northeast Kansas is the state's fastest-growing area and is in need of a safe and efficient transportation system connecting the southern Kansas City area with I-70. Currently, Kansas Highway 10 is routed through city streets in Lawrence and, according to FHWA and the Army Corps of engineers, this route creates congested and unsafe driving conditions.

In 2002, the Corps completed its Final Environmental Impact Statement and in 2003 issued a Record of Decision designating the 32nd Street alignment to be the most prudent option for the South Lawrence Trafficway.

The mitigation plan that accompanies the 32nd Street plan (selected by the Corps and agreed to in the Memorandum of Agreement signed by the Corps, KDOT, Douglas County, Baker University and the State Historical Preservation Officer) creates nearly 317 acres of wetlands to replace the 50 acres lost to construction.

During its consideration, the Corps actively sought input from over 500 American Indian Tribes, the city of Lawrence, Douglas County, area academic institutions and the general public.

Furthermore, the Corps exhaustively investigated multiple routes and a no build option when considering the alignment of the highway. These options included a south of the Wakarusa River route (42nd Street), 31st, 35th, 38th and 32nd Street routes. The Corps found that the 42nd Street route would cost $52.7 million more to build than the 32nd Street plan. While cost is not the only reason, the 32nd Street plan is more viable and should not be ignored.

Finally, the 42nd Street plan does not include a mitigation plan equal to that of the 32nd Street plan and, according to the Corps, "will result in greater long-term cumulative adverse impacts to the Baker Wetlands than the 32nd Street plan."

We urge you to support the 32nd Street alignment for the South Lawrence Trafficway (SLT).

Sincerely,

Carl Gerlach

Carl Gerlach
Mayor

cc: Senator Pat Roberts
Chad Tenpenny, State Director, Office of Senator Pat Roberts
Governing Body

City of Baldwin City

P.O. Box 86, 803 Eighth St., Baldwin City, KS 66006 (785) 594-6427 FAX: 594-6586

December 15, 2006

Mr. Wendell L. Meyer
Assistant Division Administrator, FHWA
Kansas Division Office
6111 SW 29th Street
Topeka, Kansas 66614

Dear Mr. Meyer:

The City of Baldwin City again expresses its strong support for the 32nd Street Alignment proposal for the South Lawrence Trafficway project, and recommends that the FHWA approve the 32nd Street Alignment as the only feasible and prudent option to alleviate the currently congested and unsafe traffic conditions on Kansas Highway 10 while protecting and enhancing the Baker Wetlands.

The City of Baldwin City believes that the 32nd Street alignment is the best route for this necessary highway project that will assist in connecting the southern portions of Douglas County and the greater Kansas City area to Interstate 70. The connection of US Highway 59 to Kansas Highway 10 via a bypass south of Lawrence is an important project to the City of Baldwin City for a few different reasons.

First and foremost, the 32nd Street alignment would provide beneficial access and interconnectivity of roadways for those of us that live directly south of Lawrence. The project of upgrading US Highway 59 will only increase the need for such interconnectivity. Considerable effort has been put into the 32nd Street alignment to date. Such efforts should not be wasted, and considering any different alignment would unnecessarily delay the completion of this project at considerable expense in terms of both time and money.

Second, the 32nd Street alignment proposal offers a substantial mitigation plan that includes additions and enhancements to the Baker University Wetlands, and, frankly, any such benefit to Baker University is of benefit to the vitality of Baldwin City. Third, preliminary discussions for the project at the 32nd Street alignment included assisting the City of Baldwin City with the relocation of our sole source of treated potable water, as portions of our water pipeline are currently located on private easement in the Baker Wetlands and would need to be relocated. This would be of direct financial benefit to the citizens of Baldwin City.

Again, the City of Baldwin City strongly recommends that the FHWA recommend the 32nd Street Alignment as the only feasible and prudent option for the South Lawrence Trafficway project.

Sincerely,

Jeff Dingman

Jeff Dingman
City Administrator

OLATHE
KANSAS
Mayor Michael Copeland

December 18, 2006

Wendall L. Meyer
Assistant Division Administrator
FHWA, Kansas Division Office
6111 S.W. 29th Street
Topeka, KS 66614

Dear Mr. Meyer:

I write in strong support of the South Lawrence Trafficway project, and in particular, efforts to move forward with the proposed 32nd Street Route.

Access to both the University of Kansas, and ultimately Interstate 70, is very important not only for Olathe, but eastern Kansas. The project not only addresses current critical needs, but helps develop this area to its fullest potential. As eastern Kansas continues to set the standard for job creation, innovation, and education, this access is an essential tool.

The 32nd Street Route provides the best solutions and is clearly the most financially responsible.

Thank you for your consideration of this important project.

Sincerely,

Michael Copeland
Mayor

Lenexa
KANSAS

December 19, 2006

Wendall L. Meyer
Assistant Division Administrator
FHWA – Kansas Division Office
6111 SW 29th Street
Topeka, KS 66614

Dear Mr. Meyer,

The City of Lenexa supports the Federal Highway Administration's adoption of the only feasible and prudent option: the 32nd Street alignment of the South Lawrence Trafficway. As a member of the K-10 Corridor Association, the City recognizes the regional benefit of constructing this section of highway. Currently, K-10 is routed through the city streets of Lawrence, creating congested and unsafe driving conditions. The South Lawrence Trafficway improvements will invite quality development and provide safe travel that benefits the entire northeast region of Kansas, the fastest growing area in the state.

The mitigation plan for the 32nd Street alignment provides regional benefits to the community by the construction of approximately 317 acres of wetlands. The 42nd Street alignment does not include a mitigation plan equal to that of the 32nd Street plan. Wetlands serve as a primary filter for water by trapping pollutants and allowing clean water to infiltrate into the ground. Lenexa is a regional leader in such efforts through our Rain to Recreation Program, and is impressed by the design of the 32nd Street alignment of the South Lawrence Trafficway.

Additionally, the 32nd Street option is the most fiscally responsible project. The 42nd Street would cost $52.7 million more to build than the 32nd Street plan. While cost is not the only reason the 32nd Street plan is more viable, it should not be ignored.

The City of Lenexa requests your support of 32nd Street alignment of the South Lawrence Trafficway.

Sincerely,
CITY OF LENEXA

Michael Boehm
Mayor

CC: Senator Pat Roberts
Chad Tenpenny, Senator Roberts' State Director
Lenexa City Council

Letter No. 135

The City of Tonganoxie, Kansas

P.O. Box 326
Tonganoxie
Kansas 66086

City Hall
321 S. Delaware
(913) 845-2620

City Administrator
321 S. Delaware
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City Attorney
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Tonganoxie
KS 66086
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City Shop
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Water Plant
1536 E. 4th
(913) 845-2135

Chief Tonganoxie
Swimming Pool
221 S. Main
(913) 845-9455

Library
303 S. Bury
(913) 845-3281

Fire Station
Headquarters
825 E. 4th
(913) 845-9494

Police Department
Admin. Office
603 E. 4th
(913) 369-3754

Non Emergency
Police Dispatch
(913) 845-2311

Emergency
911

City Hall Fax
(913) 845-9760

December 27, 2006

MR. WENDALL L. MEYER
Assistant Division Administrator
Kansas Division Office
Federal Highway Administration
6111 SW 29th Street, Suite 100
Topeka, Kansas 66614

Dear Mr. Meyer:

In support of regional transportation infrastructure to promote safe, efficient travel and to promote such for regional economic development, the Tonganoxie city council wishes to voice its support for the 32nd Street alignment option for a South Lawrence Trafficway.

It is our understanding a significant amount of study has been devoted to the merits of an SLT as well as roadway options that would be economic in relation to construction costs and to mitigate impacts to the environment. Furthermore, it appears the studies indicate the 32nd Street alignment to provide the best option.

We support regional traffic infrastructure for the merits it provides. The existing situation on K-10 Highway that does not allow for free flowing traffic in or around Lawrence is subject to improvement to provide new traffic corridors that move the regional population efficiently through northeast Kansas.

We commend those who have the vision to invest in undertaking the exploration of traffic alternatives. The completion of an SLT will positively affect our community and those who reside here yet commute regularly to Lawrence and points south for employment, commerce, shopping, professional services, recreation and education.

We encourage the Federal Highway Administration to move the SLT forward.

Sincerely
CITY OF TONGANOXIE, KANSAS

DAVE TAYLOR
Mayor

City of Eudora

January 3, 2007

Original
Fax Sent on 1-5-07

Mr. Wendall L. Meyer
Assistant Division Administrator
Federal Highway Administration
Kansas Division Office
6111 SW 29th Street
Topeka, KS 66614

RE: 32nd Street South Lawrence Trafficway

Dear Mr. Meyer:

The City of Eudora is located six miles east of Lawrence on the K-10 Highway Corridor. Therefore, we are quite aware of the heavy traffic load along K-10 and support the 32nd Street South Lawrence Trafficway.

K-10 has the highest traffic count for a non-metropolitan roadway in Kansas and we live in the fastest growing region in Kansas. Continuing to take traffic through the heart of Lawrence will cause increasing traffic congestion and an increase in traffic accidents, which ultimately leads to loss of life.

Several options have been studied. We believe since a mitigation agreement has been reached on the 32nd Street route and as stated by the Corp, "The 42nd Street route will result in greater long term cumulative adverse impacts to Baker Wetlands than the 32nd Street plan" that it is logical for us to support the 32nd Street alignment. In addition, the 32nd Street alignment is more cost affect with estimates showing a 52.7 million dollar savings in construction costs over the 42nd Street route.

It is time for the K-10 South Lawrence Trafficway to move forward. We thank you for allowing us to have the opportunity to express our support for this project.

Sincerely,

Thomas R. Pyle

Thomas R. Pyle
Mayor

Cc: Senator Pat Roberts
Senator Sam Brownback
Representative Nancy Boyda
Representative Jerry Moran
Representative Todd Tihart

4 East 7th • P.O. Box 650 • Eudora, Kansas 66025 • (785) 542-2153 • FAX (785) 542-1237

APPENDIX E-5
Native American Comments

Haskell Environmental Research Studies Center
Haskell Indian Nations University
155 Indian Ave Box 5001
Lawrence KS 66046
Phone (785) 749-8498
E-mail address: BrendaBrandon@msn.com

January 1, 2007

TO: Wendall L. Meyer, Assistant Division Administrator
Federal Highway Administration (FHWA), Kansas Division Office
6111 SW 29th Street, Suite 100, Topeka, KS 66614-4271

FROM: Brenda Brandon, Technical Outreach Services for Native American Communities (TOSNAC) Coordinator

SUBJECT: TOSNAC Review and Comments for K-10 South Lawrence Trafficway (SLT), Draft Section 4(f) Evaluation, November 2006

The Technical Outreach Services for Native American Communities (TOSNAC) program provides free, non-biased technical assistance to Tribal communities by presenting fundamental scientific information related to environmental issues. Its goal is to empower Native American communities with an independent understanding of the underlying technical issues so that they may participate substantively in environmental decision-making processes. TOSNAC program is housed in the Haskell Environmental Research Studies (HERS) Center at Haskell Indian Nations University (HINU) and provides outreach services to Tribes on a national level. TOSNAC review comments provide one form of technical support through the summary and review of reports related to environmental action and impacted sites.

These TOSNAC summary and review comments for the Kansas Department of Transportation (K-DOT) Draft Section 4(f) Evaluation for the South Lawrence Trafficway (SLT) are intended to provide constructive, independent information about technical issues associated with the SLT project and K-DOT Preferred Alternative selection process. This information may help the HINU community, Native American communities, and other stakeholders gain a better understanding of the Section 4(f) Evaluation process and promote informed participation and input during the current phase of the SLT Alternative Selection process (evaluation of impact to public lands, historically significant properties, and wildlife areas).

SUMMARY OF K-DOT AND OTHER PREVIOUS REPORTS

Background

In November 2006, the US Department of Transportation (US DOT) Federal Highway Administration (FHWA) and Kansas Department of Transportation (K-DOT) released a Draft Section 4(f) Evaluation for the South Lawrence Trafficway (SLT) for public review and consideration. The Draft SLT Section 4(f) Evaluation (Draft Section 4f-Eval) examines potential impact of alternative highway alignments, as presented in the 2002 Army Corps of Engineers (ACOE) National Environmental Policy Act (NEPA) document. The Draft Section 4f-Eval is one step in a chain-of-events that are working together to satisfy agency requirements for development of the SLT project. The following summary provides a timeline of important events related to the process:

- August 2002. U.S. Army Corps of Engineers (ACOE) issued the Final Environmental Impact Statement (FEIS) Section 404 Permit Application by Kansas Department of Transportation, K-10 Highway (South Lawrence Trafficway)- completes NEPA process and satisfies public input needs related to SLT investigations, alternative options and ACOE Preferred Alternative decisions.
- July 2003. Advisory Council on Historic Preservation (ACHP) executed a Memorandum of Agreement (MOA) among the U.S. Army Corps of Engineers Kansas City District; Kansas State Historic Preservation Officer; Kansas Department of Transportation; Baker University; Douglas County, Kansas; and Advisory Council on Historic Preservation Regarding the Kansas Highway 10 Bypass (South Lawrence Trafficway) in Douglas County, Kansas (see Appendix C of Draft Section 4f-Eval)- documents agreement about alternative selection and mitigation measures required for the proposed SLT alignment.
- December 2003. The ACOE issued a Record of Decision (ROD) for SLT Permit Application under Section 404 of the Clean Water Act (Section 404 Permit) - finalizes ACOE alternative selection decisions and mitigation requirements for SLT alignment.
- December 2003. Kansas Department of Health and Environment (KDHE) executed Section 401 Water Quality Certification to ACOE - confers that the SLT project meets water quality standards for Lower Wakarusa River and Baker Wetlands and stipulates that the standards will be complied with during construction and operation of the SLT.
- March 2004. The ACOE executed the Section 404 Permit to K-DOT- specifies work authorizations and mitigation requirements for ACOE Preferred Alternative.
- November 2006. The U.S. Department of Transportation (U.S. DOT) Federal Highway Administration (FHWA) and Kansas Department of Transportation (K-DOT) released a Draft Section 4(f) Evaluation for the South Lawrence Trafficway (SLT) - informs public about intention to adopt ACOE plan and solicits public input about the Preferred Alternative Alignment.

Currently, the FHWA and K-DOT have the option to approve the Section 404 Permit and accept ACOE conditions and requirements in order to place fill materials in waters and alter Haskell/Baker Wetlands for SLT highway development. The K-DOT is requesting public comment related to the selection process about conditions required for permit adoption (including mitigation requests), or reasons to deny the requested permit. Within the Draft Section

4f-Eval, K-DOT provides comprehensive examination of potential impact of the ACOE's Preferred Alternative (32nd Street Alternative B Alignment). Impact is also evaluated for the highway option that is popularly supported by the general public (42nd Street Alternative A Alignment).

The Section 4(f) Federal law was enacted in 1966, as part of the US DOT Act in order to protect historic sites, public lands, and wildlife areas. Section 4(f) mandates a land-use evaluation of federally funded highway projects and provides guidance for determination and approval of programs and projects that have the least amount of environmental impact (*de minimis* impact). Primary objectives of the FHWA Section 4(f) evaluation process include the following considerations:

- Make effort to preserve natural beauty of public lands, historical sites, and wildlife areas in development projects- called Section 4(f) properties
- Develop transportation plans and programs that include mitigation measures to maintain or enhance natural beauty of impacted environment
- Approve highway projects only if; a.) there is no better land-use alternative for highway development, and b.) the project includes all possible planning to minimize harm to impacted Section 4(f) properties
- State *de minimis* impact requirements for Section 4(f) properties, which includes avoidance, minimization, mitigation, or enhancement measures required for project implementation

The Draft Section 4f-Eval describes the five step process used to evaluate proposed SLT alternatives and reasons for eliminating options from final consideration. Twelve alternative options (including no action) were examined through the Section 4(f) screening process to select the K-DOT Preferred Alternative. Most alternative options were eliminated due to the following reasons: lack of efficiency to alleviate K-10 traffic congestion (level one); higher degree of environmental, social, and cultural impact (level two); and on basis of practicality, cost, and land accessibility (level three).

In the final screening process (level four), K-DOT evaluates impact of the 32nd Street Alternative B Alignment (32nd Street-B) and 42nd Street Alternative A Alignment (42nd Street-A) in relationship to two Section 4(f) properties; the Haskell Agricultural Farm Property, including the Haskell/Baker Wetlands; and the William Meairs Farmstead south of the Wakarusa River. In Chapter B of the Draft Section 4f-Eval, K-DOT examines land-use history, property features and local significance of the two locations identified. See Chapter D for evaluation of direct, indirect, and cumulative impacts of the 32nd Street-B Alternative to Section 4(f) properties. The K-DOT also evaluates a wide range of additional environmental consequences related to 32nd Street-B Alignment, including; consistency of SLT plans with City of Lawrence future land-use projections, relocation (businesses and residential), farm severances, as well as floodplain, wetland, stream, woodland, noise, and visual considerations.

Since publication of the ACOE ROD, total cost estimates for the SLT project alternatives have increased considerably (see table below). Draft Section 4f-Eval cost totals include mitigation

values and account for construction, operation, and maintenance cost. The 2002 ACOE total dollar values include mitigation cost, as part of the total estimate.

Total Projected Cost in Millions– (mitigation cost item for ACOE estimate)

	2002 Cost (ACOE)	2007 Cost (K-DOT)
32nd Street-B Alignment	$110.2 ($18.6)	$123.1
42nd Street-A Alignment	$128.5 ($ 1.9)	$175.8

K-DOT Preferred Alternative

The 42nd Street-A Alignment was eliminated during the final selection process primarily due to the level of potential adverse environmental impact. See Exhibit 4f-9 and Chapter C of the Draft Section 4f-Eval for description of the 42nd Street-A Alignment. Environmental consequences of the 42nd Street-A Alignment are expected to include: accelerated development south of Wakarusa River; urbanization adjacent to the wetlands; and increase in traffic bordering the wetlands. The 42nd Street-A Alignment mitigation proposal is not as significant as that offered with the Preferred Alternative, which contributes to decisions leaning toward selection of the 32nd Street-B option. In Chapter E of the Draft Section 4f-Eval, K-DOT describes the direct, indirect, and cumulative impacts of the 42nd Street-A Alignment to Section 4(f) properties and other environmental features.

K-DOT concludes that the 32nd Street-B Alignment provides the best SLT development option, based on four final screening criteria, including; safety, efficiency, environmental impacts, and cost. Accordingly, the K-DOT evaluation indicates that direct, cumulative, and indirect impact is minimized and positive impacts are maximized to the greatest degree with adoption of the ACOE/ K-DOT Preferred Alternative (32nd Street-B Alternative). In the SLT FEIS, the ACOE determined that the direct impacts to the Haskell/ Baker Wetlands will be mitigated through creation of additional wetlands. In selection of the Preferred Alternative, K-DOT considered the role of mitigation. The 32nd Street-B Alternative mitigation proposal includes a net gain of 259 wetland acres, addition of a $1.2 million "Wetland and Cultural Education Center," and other features that will benefit the general public. For description of the Preferred Alternative see Exhibit 4f-8 and Chapter C of the Draft Section 4f-Eval.

Through the public commenting process, K-DOT is requesting community input about the SLT alternative selection process and the proposed 32nd Street-B development plan. The K-DOT is also requesting response from all Native American Tribes and extends invitation for government-to-government consultation with 29 Kansas reservation and homeland Tribes. Final approval of the SLT Section 4(f) Evaluation document is scheduled for February 2007. The Record of Decision for the Section 4f-Evaluation will be finalized in July of 2007. Currently, there is no allocation of federal or state funding for SLT construction. For more information about the SLT project, Section 4f-Evaluation and K-DOT Preferred Alternative see the K-DOT sponsored website for SLT at http://www.southlawrencetrafficway.org/.

Haskell Community and Native American Environmental Justice Considerations

As recorded in the SLT FEIS for Section 404 Permit Application (2002), a significant proportion of public response to ACOE activities and NEPA process relate to Native American issues. Evaluation of public replies to ACOE proposed alternatives indicate that a wide-range and substantial number of cultural concerns were expressed by the HINU community, as well as participating Tribal representatives. Expressions of Native American concerns are reflected in 80.48% of the public comments provided to the ACOE for consideration in development of the SLT FEIS. Native American perspectives about SLT project are well documented in public meeting records and media reaction to NEPA activities. Through government-to-government relations with Tribes and interviews with Native American Elders, ACOE gained additional insight about highway development concerns and mitigation needs. Native American community response is reflected in ACOE decisions related to the SLT FEIS, ROD and resulting K-DOT Section 404 Permit that authorizes SLT work and outlines mitigation requirements.

TOSNAC identified four major areas of contention between HINU Community opinion and proposal of SLT development options offered by ACOE and K-DOT (TOSNAC comments for ACOE Environmental Impact Statements, 2002 and 2003). Outside of the technical concerns listed below, there are other inherent political and social considerations that have historically driven the NEPA process and decisions about the SLT alignment.

1.) Ownership of Wetlands
    a. 1968 land transfer of Haskell Agricultural Farm Property to Baker University is not well documented or understood by the public
    b. Haskell/Baker wetland operations are not well communicated to the general public and maintenance responsibilities are not shared with HINU
    c. There is no formalized cooperative agreement or wetlands management partnership that includes HINU along with other involved stakeholders (i.e. Baker University, HINU community, Lawrence community and involved state and federal agencies)
2.) Designation of Wetlands (Natural or Man-made) and Historical Land-use
    a. General lack of understanding of technical and regulatory issues related to wetland construction and management
    b. Lack of information about the natural geological and ecological status of lands prior to human disturbance (i.e. construction of agricultural lands and wetlands)
    c. Perceptions that historical and cultural relationship of Native American community with Haskell Agricultural Farm Property/ Wetlands is not appropriately described in NEPA documents, including the Brockington Report (Appendix A-13 of ACOE 2002 SLT FEIS)
3.) Potential Burial Sites and Issues of Sacredness
    a. Native American Grave Protection and Repatriation Act (NAGPRA) considerations
    b. Cultural sensitivity concerns related to conducting scientific studies in HINU historical properties

c. Inappropriate disturbance of potential burial sites is not acceptable to HINU and Native American community members
d. Scientific delineation of potential burial sites may be lacking

4.) Cultural Concerns Related to Alteration of Natural and Existing Environment
a. Impact to culturally significant plants, animals and wetland ecosystem
b. Loss of aesthetic value of existing wetlands and green-space
c. Impact to HINU educational systems and outdoor learning environments
d. Potential deleterious impact to Native American religious and ceremonial practices on and near impacted lands
e. Disruption to cohesiveness of cultural sites by development of highway barriers

SLT Mitigation Measures

In the Section 404 Permit (part o.), the ACOE outlines the mitigation steps that K-DOT is required to follow in order to develop SLT highway and reduce impact of 32nd Street-B Alignment option. The following mitigation conditions relevant only to the 32nd Street-B Alignment are contained within the permit text:

1. Requires K-DOT to construct, develop and implement all mitigation features described in the SLT FIES, including; creation of 304 acres of wetlands (net gain of 259 acres)
2. Requires K-DOT to relocate 31st Street to area adjacent to 32nd Street-B Alignment; remove existing 31st Street road material; re-grade and vegetate associated lands; and return construction easement to Bureau of Indian Affairs (BIA)/ HINU
3. Sets a two-year completion date (from SLT project initiation) for wetland mitigation features: relocation of Haskell Avenue and Louisiana Street with wetland construction; construction of parking, camping areas, and hike and bike trails.
4. Sets completion of "Wetland and Cultural Educational Center" at no later than 5 years from SLT project initiation date
5. Sets completion date requirements for removal of road and restoration of wetlands in existing 31st Street area (13 acres) within one year after opening the relocated 31st Street
6. Sets completion requirements of highway mitigation features to be implemented before opening relocated highway to public use - including noise walls, landscaping, and roadway runoff control features to protect wetlands
7. Requires that the 304-acre wetland mitigation areas will be protected from disturbance and preserved as wetlands in perpetuity (does not include protection considerations for vacated 31st Street area that is intended to be returned to HINU/ BIA control)

In congruence with Section 404 Permit requirements, K-DOT presents a significant mitigation proposal to address resource impact and wetlands enhancement that applies only to the ACOE/ K-DOT Preferred Alternative. Due to higher construction cost of the 42nd Street-A Alignment (primarily due to cost of expanded wetland bridge), the amount of mitigation allowance would be substantially less than that achievable with the Preferred Alternative. Other cost complexities associated with 42nd Street-A Alignment involve the need to address a large number of dislocation and severance considerations relevant to stakeholders, residential, business, farm properties and historic sites located south of the Wakarusa River. The K-DOT estimates the

added cost of the 42nd Street-A Alignment to be $23.8 million, which will significantly limit the mitigation benefits provided to the general public if selected.

Primary minimization and mitigation measures contained in the 32nd Street-B Alignment conceptual designs are prescribed by ACOE in the Section 404 Permit (see above discussion). The July 2003 MOA (Appendix C of Draft Section 4f-Eval) signifies broad agency support for building the 32nd Street-B option, with concurrence about conditional mitigation measures. Additional considerations in the MOA relate to conditions required in order to resolve adverse affects to historic properties. Some of these conditions include:

- Minimize width of bypass corridor and impact to wetlands
- Construction sequencing plans to minimize wetland impact
- Construction of 12-foot-high wall on north side, and a 6 foot berm with 6-foot-high wall along the south side of the bypass (minimize traffic noise and visual disturbance)
- Minimize highway lighting (reduce impact to wetlands)
- Record HINU Agricultural Farm Property as historic structures
- K-DOT will monitor construction activities to identify archeological site
- Protection of human remains (if encountered) under the Kansas Unmarked Burials Sites Preservation Act
- Recognize Native American Tribal representatives as monitors for excavation activities within the historic Haskell Agricultural Farm Property

Chapter F of the Draft Section 4f-Eval provides a comprehensive evaluation of proposed measures pertaining to the 32nd Street-B Alignment that K-DOT will use to minimize harm to environment. It is disclosed that K-DOT will provide Baker University with funds for an annuity that will support Baker University's efforts to manage the expanded Baker Wetlands complex. Baker University responsibilities will include ownership and management of the "Wetland and Cultural Educational Center," as well as management of 304 acres of constructed wetlands. The primary functions and secondary benefits of K-DOT mitigation efforts are summarized in the evaluation document for the following features:

- Creation of 304 acres of public wetlands
- Relocation of adjacent roadways and creation of 13 acres of HINU wetlands
- Wetland and Cultural Educational Center
- Hike and bike trails, camp sites and parking areas for public use
- Noise walls will be painted to blend-in and screened with vegetation

REVIEW COMMENTS AND RECOMMENDATIONS

To build on a spirit of open communications and respect exhibited to date during this public comment period by all parties, this paper attempts to highlight some of the most important concerns of the impacted Native American communities with respect to the development of SLT plans and impact to Haskell Wetlands and historic properties. The HINU community needs a greater understanding of technical issues associated with conceptualization and construction of SLT alignment and required mitigation features. There is need for opportunities for HINU

involvement in wetland educational and public outreach programs. This includes HINU community interest in specific plans and actions to address cultural risk concerns and impact to natural resources; and collaboration with all stakeholders to communicate concerns and become involved in decision-making processes. While the K-DOT plan makes a good start in addressing these issues, more emphasis is needed during the development and operation phases to adequately address the needs of Native Americans who currently use or have ties to the affected HINU properties. Development and implementation of a culturally appropriate educational and outreach program, that may include public information and feedback meetings and educational handouts, will help achieve meaningful community involvement.

Many of the identified Environmental Justice concerns can be approached using culturally appropriate communication processes that involve co-learning (between HINU community/ Native American Tribes and involved agencies). The development of culturally appropriate wetlands educational and outreach programs can provide measurable outcomes of success. Initiation of cooperative partnerships among HINU community and involved state and federal agencies will help address problem-definition needs and Environmental Justice issues associated with use and alteration of Native American lands. Following ACOE lead, K-DOT commits to continue government-to-government consultation with BIA, HINU Administration, HINU Board of Reagents and Native American Tribes in order to help set and uphold appropriate mitigation standards. By preserving government-to-government relations established by ACOE (during the NEPA process), K-DOT is taking positive steps to sustain good faith and open communication with impacted Native American Tribes.

Development of South Lawrence Trafficway has the potential to significantly disrupt the aesthetic constitution of the natural environment and subsequently impact the integrity of educational and ceremonial sites on HINU campus, including sweat lodges and the Haskell Medicine Wheel. Haskell has influenced many lives and is part of all Native American/Alaska Native culture and history. The HINU community reaches beyond the scope of the student body, staff, faculty, administration and immediate university environment. Native American concern about SLT project extends to a national level. Because there are multiple subpopulations of impacted people, agency partnership opportunities and activities should remain open and inclusive of participation from a broad-range of Native American/ Alaska Native representatives. Use of the term "Haskell community" in the Draft Section 4f-Eval inspires the Native American reader. It is apparent that K-DOT is making attempt to convey the significance of HINU identity, as a community connected through history, cultural experience, educational values, and land. TOSNAC recommends that K-DOT continue to foster positive working relationships and include HINU community in decision-making processes for establishing and implementing SLT goals and projects.

There are a number of mitigation measures that have not been completely conceptualized, which might be addressed during the SLT implementation phase. It is not clear how the 13 acres of created Haskell wetlands will be managed. Additionally, the Draft Section 4f-Eval does not identify parties responsible for management of public campsites, hike and bike trails, and parking areas. Presumably Douglas County, the City of Lawrence, Kansas Department of Wildlife and Parks, and other agencies/organizations will play roles in managing and maintaining aspects of the expanded Baker Wetlands complex. Other issues associated with

mitigation to HINU are not fully developed in the K-DOT document. One important concern relates to need for removal of the out-dated City of Lawrence sewage pump station that presents a health hazard, contaminates streams, and negatively impacts historic graveyard and cultural areas on HINU campus (for mitigation reference see ACOE 2002 SLT FEIS Section 4.13.2). The City of Lawrence, K-DOT, ACOE, other state, federal and local agencies could collaborate and provide a more comprehensive mitigation package to HINU Administration that includes acquisition and installation of a new sewage force main (along Haskell Ave. and the SLT) to address the seriousness of campus sanitation and wastewater concerns.

Although 32nd Street-B Alignment mitigation measures provide substantial benefit to the general public, additional measures that might benefit HINU community may also be feasible and practical. Regardless of implementation intent, all achievable mitigation measures should be identified for further consideration and discussion with HINU community. Below are a few suggestions of the type of mitigation measures that could be further investigated and discussed with HINU and impacted Native American communities:

- Identify funding programs and partnership opportunities to address operation and maintenance requirements of the new Haskell Wetlands (13 acres)
- Help build HINU capacity to direct wetland management and educational programs
- Identify wetland research, educational and outreach opportunities for HINU
- Help build capacity to develop HINU historic and cultural projects applicable to Wetland and Cultural Educational Center activities
- Develop partnerships that include HINU community participation
- Include HINU community in refining wetland management and preservation strategies
- Identify funds and opportunities to help address HINU community participatory needs (i.e. wetlands outreach programs, HINU community educational material, and participation in wetlands management and protection projects)
- Identify mechanisms to secure HINU community representation and involvement in Wetland and Cultural Educational Center activities
- Provide information and fact sheets about hazardous waste sources and generation facilities near HINU campus (includes highways)
- Provide information and fact sheets about hazards associated with projected trafficway emissions and construction activities (includes wetlands)
- Assist City of Lawrence to resolve issues associated with out-dated sewage pump station on HINU campus (see ACOE 2002 SLT FEIS Section 4.13.2)

In event that FHWA and K-DOT elect to implement the Preferred Alternative plan, K-DOT should take immediate steps to involve participation of HINU and affected Native American communities. Through partnerships with involved agencies, HINU community-based participatory plans, programs, and processes can be initiated. With extension of collaborative agreements and partnerships to include the HINU community, more inclusive historic, cultural and educational programs can evolve. Through collaboration with K-DOT and Baker University, Native Americans and HINU representatives can effectively participate in projects related to wetland protection, development, mitigation, maintenance, operations, management, educational and outreach activities.

Public acceptance is one important measure of the success of any environmental action. Evidence of disproportionate environmental impact or even perceived disproportionate impact is not to the advantage of the public and is not representative of the interest of Kansas citizens as a whole. Effective and meaningful community involvement from all sectors of the Native American community will be an important key to the successful development of the South Lawrence Trafficway. Tribal College research and outreach programs can provide avenues to address technical and culturally sensitive concerns related to SLT project. The HERS Center is in position to assist the HINU community and K-DOT with efforts to foster partnership opportunities that will contribute to Haskell Wetland development, mitigation, and protection objectives. HERS Center staff can also assist with non-biased interpretation and communication of technical information, as well as contribute to development and dissemination of community outreach material related to SLT environmental processes. Other independent, non-biased technical outreach providers may also be available.

The main recommendation is that KDOT continue opportunities for meaningful community involvement during the development and operation phase of the SLT project – to address remaining issues and to adequately address the needs of Native Americans who currently use and/or have ties to the affected HINU properties. Development and implementation of a culturally appropriate educational and outreach program, that may include public information and feedback meetings and educational handouts, will help achieve meaningful community involvement.

GENERAL COMMENTS

The above summary and associated review comments were prepared by Brenda Brandon, TOSNAC Coordinator at Haskell Environmental Research Studies Center, Haskell Indian Nations University in collaboration with Center for Hazardous Substance Research at Kansas State University. The above summary and review comments are provided at the request of Haskell Indian Nations University community representatives and prepared for use in HINU community outreach programs to help address Environmental Justice and cultural risk considerations. The Center for Hazardous Substance Research receives funding via an EPA grant to provide non-biased technical assistance to stakeholders, free of charge, at Superfund, Brownfields, Federal Facility and other environmental sites. Information presented herein is a summary of existing information in documents generated by others. It does not represent the view of Kansas State University or the EPA. No preferences or warranties, expressed or implied, are intended or made.

If you have any questions about this summary and review comments presentation or need additional information, please contact Brenda Brandon, TOSNAC Coordinator at 1-866-880-2296 or at brendabrandon@msn.com.

REFERENCES

Advisory Council on Historic Preservation (ACHP). Memorandum of Agreement (MOA) among the U.S. Army Corps of Engineers Kansas City District; Kansas State Historic Preservation

Officer; Kansas Department of Transportation; Baker University; Douglas County, Kansas; and Advisory Council on Historic Preservation Regarding the Kansas Highway 10 Bypass (South Lawrence Trafficway) in Douglas County, Kansas. July 2003.

Brockington and Associates, Inc. and HNTB Engineers and Planners, Inc. Documentation and Recommendations Concerning the Determination of Eligibility for the National Register of Historic Places of Haskell Indian Nations University and the Baker Wetlands, Douglas County, Kansas. Prepared for the Department of the Army, Corps of Engineers, Kansas City District Kansas Department of Transportation. December, 2001.

Kansas Department of Health and Environment (KDHE). Section 401 Water Quality Certification for Public Notice 200101697; Project by Kansas Department of Transportation (South Lawrence Trafficway). December 2003.

Technical Outreach Services for Native American Communities (TOSNAC). Preliminary Review Comments for U.S. Army Corps of Engineers Draft Environmental Impact Statement, Section 404 Permit Application, by Kansas Department of Transportation, K-10 Highway (South Lawrence Trafficway). September 2002.

Technical Outreach Services for Native American Communities (TOSNAC). Review Comments Related to Native American Cultural Risk Concerns for Final Environmental Impact Statement Section 404 Permit Application by Kansas Department of Transportation, K-10 Highway (South Lawrence Trafficway). February 2003.

U.S. Army Corps of Engineers (ACOE). Draft Environmental Impact Statement (FEIS) Section 404 Permit Application by Kansas Department of Transportation, K-10 Highway (South Lawrence Trafficway). August 2002.

U.S. Army Corps of Engineers (ACOE). Final Environmental Impact Statement (FEIS) Section 404 Permit Application by Kansas Department of Transportation, K-10 Highway (South Lawrence Trafficway). December 2002.

U.S. Army Corps of Engineers (ACOE), Kansas City District. Record of Decision (ROD), Kansas Highway 10 Relocation (South Lawrence Trafficway), for Section 404 Permit Application by Kansas Department of Transportation. December 2003.

U.S. Army Corps of Engineers (ACOE), Kansas City District. Department of the Army Permit Compliance Certification for Kansas Department of Transportation, Section 404 Permit (Permit No. 200101697). March 2004.

U.S. Federal Highway Administration (FHWA) and Kansas Department of Transportation (K-DOT). K-10 South Lawrence Trafficway (Project 10-23 K-8392-01), Draft Section 4(f) Evaluation, November 2006.

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Wendell Meyer
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RE: DRAFT Section 4(f) Evaluation

Dear Mr. Meyer:

First let me express that the comment deadline needs to be extended so that the FHwA can accurately assess the cultural and historical issues related to the South Lawrence Trafficway.

There are many environmental, social, and educational issues that effect both the Lawrence community as well as all Native American communities in the United States. Because the 4(f) is primarily focused with the cultural and historical issues, I will not comment for efficiency reasons on the other issues mentioned.

The issues are as follows:

1) The historic Haskell property would be massively bisected by the "32nd St" SLT plan.
2) Alternatives south of the Wakarusa River were not fairly evaluated & costs were inflated. This area is sacred to many Native Americans from tribes across the country.
3) Claims that paving the wetlands will end the mess on 23rd Street are false & misleading.
4) A true southern by-pass of the city should not be routed north of an area where Lawrence plans to have 20,000 new residents in the near future.
5) The draft 4(f) unfairly dismisses oral traditions about the role this place had in the survival of Indian cultures and languages vigorously suppressed during the boarding school era.
6) Preserving the wetlands is important to Haskell's future as a center of indigenous academic excellence and leadership. The restored wetlands play an irreplaceable role as a unique symbol of how American Indians survived decades of government efforts to exterminate native cultures through a grossly distorted and fundamentally inhumane form of "education".

7) Kickapoo nation members gather milkweed in the Baker wetlands and the 10 lane highway will deter the use of this cultural resource.

8) Potowatomie have offered to help fund another route south of the river that would save KDOT over $100,000 dollars on this project.

9) The medicine wheel's spiritual value to the Native American cultures will diminish severly.

10) Native American Church will not be able to continue ceremonies due to the lighting of the night sky.

11) Sweatlodge ceremony practioners believe that the noise pollution will detract from their ability to heal community members.

The DRAFT Section 4(f) Evaluation works hard to sever the history of Haskell from that of the wetlands, apparently in order to justify running the SLT between the two. Specifically, page 4f-17 notes that:

"...the Keeper made it clear that the Haskell Agricultural Farm Property should not be considered as a district in combination with the National Historic Landmark buildings on the central, main campus of the University."

This interpretation distorts the very sources it claims to represent. Specifically, page 2 of the Brockington Report (Appendix F) notes that:

"The recommendation of this document is that the modern campus of Haskell, together with the Baker Wetlands should be considered an historic district eligible for the National Register." (Underlining added.)

On 11/7/02, the Keeper of the National Register (Appendix E) does not sever the wetlands from the main campus. Rather, he/she discusses the fact that modern improvements – principally on the main Haskell campus -- have undermined the overarching historical integrity. However, he/she then goes on to list Haskell-related assets – including the wetlands -- that have been or are eligible for inclusion on the national register. I think that's the point...the buildings, features and the wetlands are all an integrated part of the Haskell history.

On 3/20/03 the Keeper of the National Register (Appendix E) restates the/7/02 finding, again listing the cluster of Haskell-related sites – including the wetlands -- that are of national significance.

It appears the 4(f) evaluation ignores the connection of the Baker wetlands to Haskell. Even the history of the Baker wetlands has an unethical history as it pertains to how

Baker acquired the wetlands through a series of conveyances that in the end violates the legislation (Surplus Act) it was authorized under.

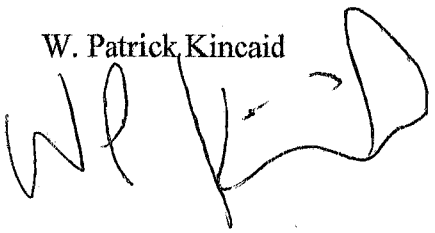
The 4(f) evaluation comes across as extremely biased in the consideration of the Native American community. It seems as though Haskell's concerns are downplayed as a low priority so that this highway is built along the 32nd street alignment.

The Native American Law Student Association feels that this document is so biased that if allowed to be the justification for this cultural and historical degradation, that it warrants litigation.

Thank you for your time and going through the NEPA process.

Respectfully Submitted,

W. Patrick Kincaid



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RE: DRAFT Section 4(f) Evaluation January 17, 2007

Dear Mr. Meyer:

In 1953 I graduated from Haskell Institute. It is a place where many different Indian nations came together, where we became a family, the Haskell family. Our hopes and dreams for unborn generations are centered there.

Despite the terrible things that were done at all the government run boarding schools to wipe out the Indian in us, we are still here. I am at least as Creek in 2007 as I was when I entered Haskell Institute more than half a century ago. Where we overcame adversities is as important to my sense of history as how or when it happened.

Most Americans are taught to remember history as time lines. The past is presented as a linear thing, a series of progressing events: causes, effects, outcomes. You "preserve" your version of history by writing it down. Most people never think about how easily that kind of record can bend the truth, or make parts that are very important to other people vanish. Much of our Haskell history is invisible to non-Indians.

PLACE is the "carrier" of our past. Places are at the heart of how we Indians recall, how we communicate, and how we teach our young. Events accumulate in particular locations. They become part of meaning-filled landscapes. That is why our history lives in the land; reborn in the stories we pass on to our children. PLACES BECOME SACRED by what happened there. We return to sacred places like the wetlands to find peace, to be healed, to reconnect to our past, and to renew our traditions. The trafficway should go south of the Wakarusa. It doesn't belong anywhere in these wetlands.

Sincerely,

Martha Houle

Martha Houle
Three time past president of the National Haskell Alumni Association
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January 19, 2007
Hand-Delivered

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Re: Draft Section 4(f) Evaluation for the South Lawrence Trafficway ("SLT").

Dear Mr. Meyer:

We have received your November 2006 Draft Section 4(f) Evaluation (the "Evaluation"), which is substantially defective in several respects. The Evaluation makes the mistake of incorporating the misguided reasoning and, consequently, the substantial errors found in the Corps of Engineers' December 2002 FEIS ("FEIS"). In general, we incorporate herein by reference and ask that you copy, consider and include in your record all of the materials in the record(s) prepared in the course of the Corps activities concerning the SLT. Please confirm in writing that you will do this.

In our May 30, 2006, letter to you, we explained that the FEIS ignored the cheaper and more prudent south-of-the-river options, including what we have called the 42C alignment. We further explained to you that the FEIS failed to take into account important developments, including the growth of the City of Lawrence since the time the Haskell Farm SLT route was first considered more than 20 years ago. Your Evaluation not only repeats the same grievous errors found in the FEIS, it also includes new misinformation again designed by HNTB and KDOT to favor the 32B alternative and to disparage and ignore the 42nd St. options. Let me explain.

Omission of 42C Alignment

The Evaluation erroneously indicates that the FEIS considered the 42C route as an official alternative. The 42C route inexplicably disappeared from consideration before the official alternatives were formulated and discussed in the FEIS. The 42C route did initially appear in a December 5, 2002, "Concept Corridors" map prepared by HNTB.[1] The alignments on this 2002 map were intentionally labeled "concepts" to eliminate the impression that these were official alternatives.[2] After the initial 2002 Concept Corridors map showing 42C, the official FEIS alternatives for 42nd St. inexplicably ignored 42C and were instead designed as 42A and 42B[3], which go over the substantially wider part of the eastern Wakarusa River floodway, resulting in greatly increased bridge costs.[4]

Your Evaluation erroneously indicates that the 42C alignment was an official FEIS alternative. (See Evaluation p. 4f-24 and Exhibit 4f-6.) HNTB has evidently taken the old 2002 "Concept Corridors" map and on August 21, 2006 relabeled it as "Alternatives", which gives the false impression that 42C was an official FEIS alternative. Similarly, notwithstanding your Exhibit 4f-6 showing a 42C route, your Evaluation omits 42C as an official alternative and instead only considers 42A and 42B. (See Evaluation p. 4f-27, 4f-29.) Therefore, in this respect the Evaluation is defective for the same reason the FEIS is defective. The Evaluation continues to ignore reasonable 42nd St. options.

Alignment Costs Miscomputed

The Evaluation has erroneously altered the costs for 42A and 32B from the amounts discussed in the FEIS. First of all, the Evaluation has arbitrarily equalized their unit costs for grading. In Lawrence on December 14, 2006, Mr. Pasley of HNTB told me that the grading costs for 32B are much higher than 42A due to 32B's lengths of road through wetland and hydric soils. He said that 32B will require layers of special mats and rock layers for the roadbed and a tremendous amount of fill. Because 42A does not have these issues, it should have much smaller unit costs.[5] Second, the 32B mitigation costs have inexplicably

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[1] See Corps of Engineers December 2003 Record of Decision ("ROD"), Exhibit 1.

[2] Because the HNTB/KDOT design team did not want the public interfering with their selection of the 32nd St. alternative, they decided to "use the word concept instead of alternative to dissuade [the] public from thinking they have decision making power." See ROD Appendix I, Section G, Item 14, July 18, 2003 letter to Col. Curtis, p. 2, citing the April 11, 2001 K-10 Team Meeting discussion notes (letter Ex. I).

[3] See FEIS p. 2-3, 2-9, 2-20 to 2-21, Exhibits II-24 (42A) and II-25 (42B).

[4] See ROD Appendix I, Section G, Item 18 and 20.

[5] No one seems interested in why the FEIS had such lower grading unit costs for 42A even though the footnote for those FEIS costs demonstrates that they were thoroughly considered. "(1) Varies based on soil

fallen from the $18.6 million in the FEIS to $13.3 million in the Evaluation. Third, as we documented for the FEIS, the bridge costs are based upon excessively wide bridges (they should be 80 feet of twin two-lanes rather than a single 90 foot span), and the shorter, much cheaper bridges on 42C have never been considered. Finally, your bridge costs are based upon very high current rates due to "increased material costs resulting from shortages associated with the reconstruction efforts to repair infrastructure damaged by hurricanes Katrina and Rita." (See your December 11, 2006 letter to me.) Because there is no money currently to pay for the SLT and it would in any case not be built for a period of years, costs should not be artificially based upon temporarily inflated short-term rates but instead upon average rates. These manipulations of costs are just another apparent effort by HNTB to inflate the cost of the 42nd St. route relative to 32B.

Mitigation Generally Ignored for the 42nd St. Options

Like the FEIS, the Evaluation does absolutely nothing to prepare reasonable 42nd St. alternatives that include mitigation against future impacts that the Evaluation alleges will occur for that route. Evaluation p. 4f-37. We request that multiple mitigation alternatives be professionally prepared for all 42nd St. routes as additional official alternatives.

Impacts of 42A and 32B

It is erroneous for the Evaluation to conclude that the 42A impacts would be greater than the impacts for 32B. The Evaluation opines that the 42A indirect impacts on the Haskell Farm would be greater than 32B's direct and indirect impacts from running eight lanes of pavement and traffic squarely through the Farm. How absurd! The impacts alleged in the Evaluation for 42A have been greatly exaggerated while the impacts for 32B have been generally ignored. A detailed analysis of the Evaluation shows just how wrong its impact discussion is.

The Evaluation states that the 42A impacts are greater than for 32B for three basic reasons: "[1] increase in traffic on adjacent roads (Louisiana, Haskell and 31st), [2] development immediately adjacent east and west of the Haskell Agricultural Farm Property, and [3] the future stability of the Baker Wetlands." (p. 4f-37) I will address these three points in turn.

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type. Estimated based upon HNTB internal review (8/29/01, 9/07/01 & 9/19/01)" See FEIS Appendix A-II.

1. **Increase in traffic on adjacent roads (Louisiana, Haskell and 31st).** The Evaluation assumes that the 42nd St. route will cause increases in the traffic on these roads based upon sheer speculation that 42A "is expected to accelerate development south of the Wakarusa River since development is expected to follow the new roadway into this rural setting." (p. 4f-37) This statement is erroneous for several reasons:

a. Development south of the River and increases in traffic are going to occur in Lawrence in any case with or without the 42A route.

i) In January of 2004 the Lawrence Urban Growth Area was expanded from the Wakarusa River to at least 2.5 miles south of it along a broad east-west boundary. (See attached Map 3-1-Lawrence Urban Growth Area Service Areas & Future Land Use[6], Exhibit A.) This new UGA has been amended into the *Horizon 2020* future land use plan.[7] The *Horizon 2020* UGA has been revised due to "the unforeseen circumstance of the comprehensive plan under estimating the rate of population growth of the City of Lawrence and the additional area that will be required to accommodate growth." (See Planning Commission Staff Report – 08/27/03, page 3-6.) "The UGA forecasts what areas may become part of the City of Lawrence's urbanized area by 2020." (p. 3-8) The 42nd St. alternative is now clearly *consistent* with planned future land use development to the south. Contrary to the outdated FEIS, 42A will not "create infrastructure demand outside of the currently planned areas" (FEIS 4.2.7) because growth there is now planned, and 42A is "compatible" with the amended *Horizon 2020, Transportation* plan. (FEIS 4.2.8).

ii) The City of Lawrence will build a Wakarusa Water Reclamation Facility *south* of the River by 2011. (See attached November 2, 2006 letter from David Corliss, Exhibit B.) A Water/Wastewater Master Plan providing for this was approved on November 11, 2003. Thus, also contrary to the outdated FEIS, "planning and/or construction of a municipal wastewater treatment system" has now "precede[d] development south of the Wakarusa River." (FEIS 4.2.1.) The wastewater plant is planned south of the Wakarusa River near the 42nd St. routes being discussed. (See

[6] Map available at http://www.lawrenceplanning.org/documents/ugamap.pdf.
[7] See http://www.lawrenceplanning.org/documents/Horizon2020.pdf.

attached Exhibit C. The plant area is to be somewhere within the dark blue boundary.)

These two very major events demonstrate that municipal growth south of the Wakarusa River is inevitably occurring without being caused by a 42nd St. SLT route. In fact, they have occurred at a time when the Corps has been favoring the 32B route in its December 2002 FEIS and December 2003 ROD. Therefore, it must be generally concluded that any future increases in traffic on Louisiana, Haskell and 31st will occur due to this inevitable southern growth and not merely from building a 42A SLT.

b. KDOT's own traffic studies show that the 32B and 42A routes would have very similar impacts on south Lawrence traffic near the Haskell Farm. The 2025 vehicle traffic per day has been projected for these street segments[8]:

	32B	**42A**	No Build
31st: Louisiana to Haskell	19,500	19,600	26,500
31st: US 59 to Louisiana	24,300	23,500	32,200
31st: Haskell to E1600	13,900	11,400	0
Louisiana: 27th to 31st	21,400	23,300	22,900
Haskell: 27th to 31st	27,900	24,400	35,500
Totals vehicles/day	**107,000**	**102,200**	

Thus, the 2025 vehicle traffic on roads near the Haskell Farm would actually be less for 42A than for 32B. Although the KDOT study did not include traffic south of 31st on Louisiana and Haskell, the study does cover vehicles going to and from there. Thus, to conclude that 42A will create more traffic near the Haskell Farm than 32B is not only sheer speculation, it is contrary to the traffic projections.

c. The traffic on Louisiana and Haskell adjacent to the Haskell Farm can in fact be expected to be much greater for 32B than for 42A. The traffic to and from the new Lawrence growth area south of the Wakarusa River will be carried by 42A to the east and west away from the Haskell Farm area. Residents there could easily travel west on 42A to the high intensity retail areas near 31st and Iowa St. Thus, the Evaluation incorrectly states that 42A "will not provide any protection from future development" and traffic when 42A will in fact divert traffic from southern development

[8] See November 9, 2001 KDOT Report, FEIS Appendix A-7.

to the east and west away from the Haskell Farm. (p. 4f-37) On the other hand, under 32B residents of southern development would be required to drive south on Haskell, past the Haskell Farm, to enter the Haskell/32B interchange. The 32B route will serve to concentrate traffic near the Farm at the Haskell/32B interchange, a fact that is being entirely ignored.

d. For 42A, minor landscaping near 31st St., west of Haskell Ave. and east of Louisiana St. would adequately diminish any impacts on the Haskell Farm from increased traffic. The 32B Mitigation Plan would expand 31st St. to four lanes between Louisiana and Haskell. These four lanes would face the current Haskell University property nearby on the north. The Evaluation states that the existing scrub trees and dike on the north of the Haskell Farm would under 32B eliminate 31st St. traffic impacts to the north. If these existing trees and dike are sufficient to provide a buffer for 31st St. if it is relocated under 32B, then the same trees and dike would also obviously provide a northern Haskell Farm buffer to a widened 31st St. under 42A. Therefore, 32B's relocation of 31st St. provides no benefit to the Haskell Farm and instead only harms it by running this street directly through it.

If landscaping is a reasonable solution for 32B, why wouldn't it also be a reasonable solution for 42A to diminish the impact of any increased traffic on 31st, Louisiana and Haskell?[9] The Evaluation should be revised to evaluate these buffers for 32B and 42A in a consistent manner. New alternatives should also be prepared for the 42nd St. routes with existing and new buffers incorporated into them to reduce these alleged impacts, as has been done for 32B.[10]

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[9] For example, the entire one mile length of Haskell Farm frontage on the east of Louisiana St. has a wide right-of-way, then a large canal and finally a dike, which at its top is roughly 10 feet above the elevation of the street. Adding a few trees on the right-of-way and on the dike would provide the same buffer viewed as being adequate in buffering 31st St., as widened under 32B, from Haskell University on the north. Further, because the Haskell Farm lies entirely below this dike on its east side, traffic on Louisiana St. can not be seen from the Haskell Farm. Thus, there would be virtually no visual impacts to the Haskell Farm from additional traffic on Louisiana St., and any additional noise would similarly be muted by the existing dike and the distance to the Haskell Farm property east of the dike. In a similar way for 31st St., the existing dike and tree line on the northern border of the Haskell Farm would provide to the Haskell Farm the very same buffer from a widened 31st St. under 42A that the Evaluation says is adequate as a buffer for a widened 31st St. under 32B. How is it that the Evaluation views the buffering effect of the same existing dikes and trees so inconsistently. The obvious answer is that its analysis is skewed by KDOT bias, which seeks only to exaggerate the impacts for 42A and to minimize them for 32B.

[10] The Evaluation generally neglects to recognize or incorporate existing or new trees, dikes and other reasonable mitigation features for the 42A alternative. The Evaluation states that if 32B in not selected, land that could be retained for 42A mitigation will be sold. "The land was purchased by KDOT after it had

The Evaluation is completely inconsistent in its judgments of 32B and 42A. For 32B it views trees and a dike as adequate to sufficiently mitigate 31st St.'s adverse impacts on wetlands and Haskell University property to the north. On the other hand, for 42A the Evaluation inconsistently assumes great impacts from traffic on 31st, Haskell and Louisiana and ignores this same landscaping mitigation as a solution. Recognition and development of mitigation for 42A would reduce its alleged traffic impacts and, when understood in conjunction with the inherent limitations on urban development in the floodplains near the Haskell Farm, as discussed below, should compel the conclusion that the adverse impacts from 32B, with its eight lanes of pavement directly over the historic property, are in fact much greater than the actual indirect impacts from 42A, a route that avoids the property altogether.

2. **Unreasonable speculation of development near the Haskell Farm.** The Evaluation's second reason given for greater 42A impacts is attributed to alleged "development immediately adjacent east and west of the Haskell Agricultural Farm Property." (p. 4f-37) The landscaping buffers discussed above for vehicle traffic under 42A would serve equally well in buffering the Haskell Farm from any nearby development. However, for several reasons it is erroneous to assume in the first place that there will be material development east and west of the Haskell Farm.

a. <u>The relevant frontage on Louisiana St. and Haskell Ave. is almost all in the floodplain</u>. Under the applicable land use plans, as recognized by the FEIS, "Land located within the 100-year floodplain is not recommended for urban development."[11] Further, although it is technically possible to build in a floodplain, Lawrence has adopted the more stringent "no rise policy" that a building in the floodplain must not raise the floodwater level in any way.[12] Thus, expensive hydrological studies and pool mitigation structures would be required to build in the floodplain.[13] Therefore, contrary to the Evaluation, it should instead be generally assumed that the floodplain

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had been platted and was planned to be utilized for right-of-way and mitigation associated with" 32B. "This land will most likely be returned to private ownership and will be subject to urban development if the 42nd Street Alternative is selected." (p. 4f-37 to 4f-38) Again, why are this and other reasonable mitigation features being ignored for 42A?

[11] FEIS, Sec. 4.2.1, p. 4-1.

[12] See www.lawrenceutilities.org/wwrf/faq.shtml, "The City of Lawrence...dictates a no rise policy within the entire 100-year floodplain."

[13] See Lawrence Development Code, Sec. 20-1201 *et seq.*

frontages east and west of the Haskell Farm will not be materially developed.

b. The specific facts also show that development on Haskell Ave. or Louisiana St. across from the Haskell Farm would be unlikely or extremely limited. Let's look at the specific frontages.

i. **The Haskell Ave. frontage.** The east side of the Haskell Farm consists of 1.19 miles of Haskell Avenue.

Going south on Haskell from 31st St., the first .12 mile section of this Haskell frontage is just outside the floodplain and currently consists of commercial facilities. Obviously, this development cannot be blamed on 42A, and this development will continue whether 42A is built or not.

The next .4 mile section of Haskell frontage is in the floodplain on the west side of the Santa Fe Mitigation Site, a state-owned wetland restoration area. Most of this frontage lies in the floodway, where building is categorically prohibited. Obviously, there will be no development in this section.

The next .33 mile section of Haskell Ave. runs from just south of 35th St. to the north boundary of the south floodway channel. This section lies in the floodplain between the split Wakarusa River floodways north and south of it. Although building in the floodplain here would not be categorically prohibited, it would be contrary to the relevant land use plans. Further, its location between the two floodways is a good indication of greater water velocity during a flood and, therefore, the cost of mitigation to maintain the pool level would probably be prohibitive. Finally, even if it were feasible, the density of any development there would be greatly limited due to the greater mitigation requirements for a larger structure or for more than one structure.

The final .35 mile section of the Haskell Ave. frontage lies in the Wakarusa River south floodway, where development is categorically prohibited.

In summary, 73% of the Haskell Ave. frontage east of the Haskell Farm will obviously not have new development under 42A. The

remaining 27% (the .33 mile section) is still in the floodplain and development there is unlikely. If new trees and a berm on the west side of Haskell there is not viewed as adequate mitigation, there should be additional 42A mitigation at minimal cost by purchasing a 300 foot by .33 mile strip of this east-side frontage.[14] After this purchase there would be no new development there or anywhere else on the Haskell Ave. side of the Haskell Farm.

ii. **The Louisiana St. frontage.** The west side of the Haskell Farm consists of 1.0 miles of Louisiana St.

Going south from 31st and Louisiana, the first .4 miles of this frontage lies in the floodplain, where development would be contrary to the land use plans and would in any case be expensive. Apparently, the state already owns this property.[15] If tree line mitigation and the dike on the east side of Louisiana is not viewed as adequate mitigation, the state could simply at minimal cost retain a 300 foot by .4 mile strip of this frontage, plant some trees, and the mitigation would be just as effective as that provided for the Haskell University property north of 31st St. under 32B.[16]

The remaining .6 mile section of Louisiana St. frontage on the south will obviously not be developed if 42A is built. This is true because the first .19 miles of this section is in the north Wakarusa River floodway, where development is categorically prohibited, and the final .41 miles of it lies within the 63 acre, 42A mitigation area. Obviously, there will be no development on this .6 mile section.

In summary, the Evaluation should have concluded that the Haskell Ave. and Louisiana St. frontages along the Haskell Farm generally lie in the floodplain and will not be materially developed. For the small portion of this frontage where new development in the floodplain is unlikely, but still not obviously impossible, reasonable mitigation for 42A, as described above, would eliminate all possible new development east and west of the Haskell Farm.

---

[14] This same land is already planned to be purchased for 32B mitigation. The cost of this strip would be far less than the mitigation planned for 32B.

[15] See discussion of the land purchased by KDOT at p. 4f-37.

[16] The statement at p. 4f-38 that the land would be sold if 32B is not built demonstrates KDOT's ongoing refusal to formulate or consider reasonable mitigation features for the 42nd St. routes.

Given all of the above facts, it is erroneous for the Evaluation to conclude that under 42A the Haskell Farm "will be left unprotected to adjacent development."[17] All of this speculative development would be in the Wakarusa River floodplain along frontage where, for the most part, it obviously can not occur. In any case, all new development could be entirely prevented with some minor additional mitigation for 42A. Only one specific concern has been expressed about development near 31st and Louisiana St., but this can be easily remedied by retaining a small amount of the land already owned by KDOT for 42A mitigation.

c. **Development South of the Haskell Farm.** The southern Wakarusa River floodway with its riparian woodlands spans the entire southern border of the Haskell Farm. Development is prohibited in this floodway area, so it will remain undeveloped and will continue as a natural buffer against development. On the other hand, 32B would have a greater adverse impact on this area because it would alter some of this floodway for tent camping and public access. For 42A the Evaluation complains that the Haskell Farm will be impacted from development on the south. (p. 4f-38) This development will occur under both 32B and 42A, as discussed above. Given that the impacts of 32B here are greater than for 42A, if this issue is important, it should be discussed as a greater adverse impact for 32B. Not surprisingly, the Evaluation ignores this issue in discussing the impacts of 32B.

3. For the Evaluation's third reason why the 42A impacts are greater, it is extremely speculative to state that 42A would impact the alleged "future [financial] stability of the Baker Wetlands." (p. 4f-37) There is no evidence or mention as to how much money it takes to maintain this "stability." Given the fact that the wetlands have been at the Haskell Farm location for thousands of years, it should be assumed that they can continue to exist at little or no cost. Further, if the maintenance costs were known, a minor fund for mitigation under 42A could easily address this and eliminate any such impacts for 42A. If the Evaluation thinks this is an issue, mitigation for 42A in this regard must also be examined as an alternative for 42A. Instead, the Evaluation has selectively prepared extensive mitigation for 32B, done little mitigation for 42A and then complained of unmitigated problems with 42A.

[17] p. 4f-38.

4. The Evaluation's remaining discussion of the impacts of 42A and 32B is also arbitrary and capricious in its judgments and unreasonable in its conclusions.

i. **Noise.** The Evaluation absurdly states that the noise impacts for 42A are significant "due to introduction of a highway in an area with little development and minimal traffic noise." (p. 4f-39) Couldn't this be said of any highway constructed through the countryside?[18] This isn't a problem, it is a virtue for 42A because there are few people around to hear it, when people do begin to reside near there they can plan for it and its noise will have no material impact on the Haskell Farm. On the other hand, although 32B would be constructed through the Haskell Farm, the Evaluation does not even mention that its noise impact would be significant.

The Evaluation only discusses whether 32B's noise with sound walls is less than the maximum permissible level. (p. 4f-34) With 32B's noise level of from 51.1 to 64.1 dBA, it exceeds the permissible 57 dBA sound level for this environmental, historic area where serenity and quiet are of extraordinary significance and serve an important public need.[19] Even if the Haskell Farm were considered Category B property (grouping it with motels), 32B's noise levels of 64.1 dBA would barely clear the 67 dBA limit. Thus, 32B's noise levels either exceed or barely clear the maximum permissible levels. Nevertheless, the Evaluation does not even mention 32B's significant noise impact on the Haskell Farm.

The crowning absurdity is for the Evaluation to speculate that even with these very high 32B noise levels, it will be noisier at the Haskell Farm in 2025 if 42A is built. (p. 4f-35, ¶f. Noise Impacts) Where this 42A-related noise would come from or how it could exceed the levels of eight lanes of heavy traffic directly through the Haskell Farm is not explained. This assumption is not only facially absurd, it is contrary to these facts as discussed above:

---

[18] Although the 32B route would also go through undeveloped areas, the Evaluation arbitrarily ignores this alleged impact for it.

[19] The record for the FEIS and other comments to the FHA provide extensive testimony as to the spiritual, environmental, educational and cultural importance of the Haskell Farm area to Indian and non-Indian people.

1. The 2025 42A traffic on 31st St., Haskell Ave. and Louisiana St. will be equal or less than for 32B.

2. With 42A, traffic on the surrounding streets is buffered with existing landscaping, similar to that approved for 31st St. under 32B.

3. Minor additional landscaping mitigation for 42A would provide adequate buffers to any traffic noise.

4. 42A will serve to divert traffic from southern development to the east and west away from the Haskell Farm.

5. 32B will draw traffic from southern development to the Haskell Farm area, and it would concentrate traffic around the 32B/Haskell interchange near the Farm.

6. Development near the Haskell Farm in and near the floodplain will be severely limited or non-existent under 42A.

The Evaluation has gone completely overboard in unreasonably preferring the 32B route.

ii. Visual Impacts. The Evaluation similarly ignores the obvious visual impact of 32B's eight-lanes of pavement and traffic through the Haskell Farm. (p. 4f-35) Even though the area would be landscaped, the visual presence of 32B would certainly not be low to anyone viewing the very massive structures that 32B would require through the Haskell Farm.

While ignoring the obvious impacts of 32B, the Evaluation complains that the 42A bridge ½ mile west of the Haskell Farm will be seen by visitors to the Farm. (p. 4f-39) The fact is that the 10 foot high dike running the entire western side of the Farm would prevent this bridge from being visible. The Evaluation also complains that 42A "will have a high degree of visual impact to the rural landscape south of the Wakarusa River." (p. 4f-39) Again, this exaggerated minor point can be said of any highway that runs through the countryside. The fact is that there would be no visual impacts from 42A on the Haskell Farm, and this should be the principal concern and conclusion.

iii. The Evaluation concludes with more speculation that 42A will add "development pressure" south of the river and create "infrastructure demand." As discussed earlier above, 42A is obviously not causing the Lawrence development south of the Wakarusa River. However, 42A could both serve that development and at the same time protect the Haskell Farm by diverting traffic from there to the west and east away from the Haskell Farm. Finally, the Evaluation, like the outdated FEIS, fails to acknowledge that 42A is consistent with future land uses and the Urban Growth Area for Lawrence.

The SLT Design Criteria

The 32B route fails to satisfy critical SLT design criteria. With the revised Lawrence Urban Growth Area, 32B would be 3.5 miles inside of the southern UGA boundary, and it would join K-10 two miles inside of the eastern UGA boundary. (See attached Exhibit A.) Thus, 32B is inconsistent with the future land use plans. It is not the circumferential roadway required for the project. ("A circumferential road system is necessary." FEIS p. 4-1)

A New "42D" Alignment

A new "42D" alignment must be evaluated as an official alternative. It is feasible to alter the 42A alternative to have it continue further east to join K-10 just east of the Wakarusa River. (See attached Exhibit D.) There are many good reasons to consider this 42D alternative:

1. The recent increases in bridge costs for 42A and 42C are a good reason to consider the new 42D option. 42D would avoid most of these bridge costs, it would only require 2.5 more pavement miles than 42A and it would cost roughly $40 million less than 42A.

2 In Lawrence on December 14, 2006, Mr. Pasley of HNTB said to me that it would make sense to consider an option that carries 42A further east. Even Mr. Pasley, KDOT's lead designer for the SLT, admits that a 42D alternative should be considered.

3. The 42D/K-10 interchange would be on the eastern UGA boundary and 42D would thus be a more circumferential roadway than 42A. (See attached Map, Exhibit A.)

4. The Kansas Turnpike Authority has announced that it will construct an interchange at Tonganoxie, Kansas on Interstate 70. The road going south from this new interchange goes to Eudora, Kansas, which is very near the 42D/K-10 interchange. 42D could thus be the southern leg of a road beltway that in the future turns north from the 42D/K10 interchange and travels up on the west side of Eudora to the new Tonganoxie turnpike interchange.

In view of all this, I request that you prepare the 42D route as an official alternative for purposes of the Section 4(f) evaluation, including a full range of mitigation as discussed above.

The impacts alleged in the Evaluation for 42A have been fabricated from erroneous speculation, gross exaggeration and capricious judgment. The impacts for 32B have been grossly understated, ignored and analyzed with bias passed on to you from KDOT and HNTB.

All of the south-of-river alignments (42A, 42B, 42C and 42D) must be properly evaluated as official alternatives under your Section 4(f) process, both with and without a full range of mitigation, as discussed herein. It should then be concluded that one or more of these 42nd St. alternatives are reasonable and prudent and result in less net harm to the Haskell Farm and otherwise than 32B.

The Prairie Band Potawatomi Nation requests that the Federal Highway Administration do its duty, exercise independent professional judgment and properly prepare and evaluate all alternatives for the Section 4(f) evaluation. We ask that you not succumb to the twisted, tortured and unsupported arguments prepared for you by KDOT and HNTB in their blind pursuit of 32B.

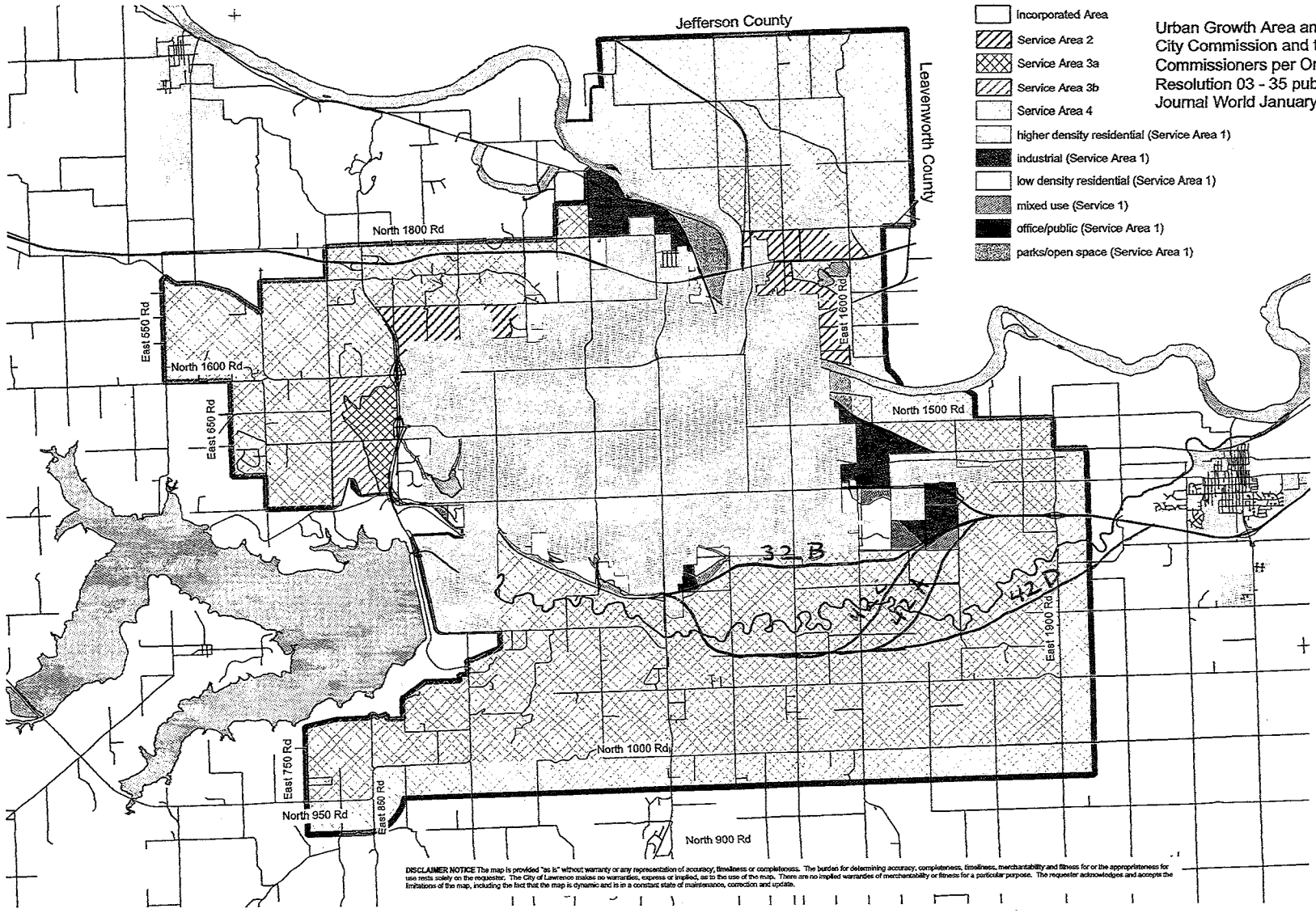
If you have any questions, please feel free to give me a call.

Sincerely,

David Prager, III

David Prager, III

Map 3 - 1 - Lawrence Urban Growth Area
Service Areas & Future Land Use



Legend

- Incorporated Area
- Service Area 2
- Service Area 3a
- Service Area 3b
- Service Area 4
- higher density residential (Service Area 1)
- industrial (Service Area 1)
- low density residential (Service Area 1)
- mixed use (Service 1)
- office/public (Service Area 1)
- parks/open space (Service Area 1)

Urban Growth Area amended by the Lawrence City Commission and the Douglas County Board of Commissioners per Ordinance 7731 and Resolution 03 - 35 published in the Lawrence Journal World January 31, 2004

0 0.5 1 2 Miles

Exhibit A

City of Lawrence
KANSAS

DAVID L. CORLISS
CITY MANAGER

City Offices
Box 708 66044-0708
TDD 785-832-3205
6 East 6th
785-832-3000
FAX 785-832-3405
www.lawrenceks.org

November 2, 2006

Mr. David Prager, III
Tribal Attorneys Office
Tribal Government Center
16281 Q Road
Mayetta, KS 66509

Dear David:

I am in receipt of your October 23rd letter to the Lawrence City Commission regarding the Wakarusa Water Reclamation Facility (WWRF) location and want to thank you again for meeting earlier this week with me, City staff, and representatives from Black & Veatch, the City's consultants for the siting of this project. I think we had a good discussion at that meeting of the efforts the City and our consultant have taken to insure that the purchase of property and siting of the WWRF is "neutral" to any of the known routes for the South Lawrence Trafficway.

As noted in the attached letter from Mike Orth, Black & Veatch, the initial construction area for the 7 mgd plant, scheduled to be operating in 2011, can be located so as to have "no impact on routes A, B...or C of the SLT". Further, it is anticipated that an initial plant expansion could be designed/constructed and still remain neutral to these potential SLT routes. Only when a second expansion is necessary to serve a service population of 200,000 will the City need a definitive understanding of the SLT location, if not already determined at that point in time.

We appreciate your input and interest in this project and would encourage you to remain in touch with our staff and the project updates provided on our website (www.lawrenceks.org) as we move forward through the design and construction phase. On a related note, we look forward to meeting with members of the

Exhibit B

Haskell Indian Nations University's Ecology Club on November 14th in order to make a campus presentation of the status of the project.

Sincerely,

David L. Corliss
City Manager

att. (1)

c: City Commissioners

BLACK & VEATCH
building a world of difference™

ENERGY WATER INFORMATION GOVERNMENT

City of Lawrence
Lawrence, Kansas
Wakarusa Water Reclamation Facility

B&V Project 145333.200
B&V File B-1.1
October 31, 2006

Mr. David Corliss
City Manager
City of Lawrence
PO Box 708
Lawrence, Kansas 66044-2268

Dear Mr. Corliss,

We have reviewed the correspondence forwarded to us dated October 23, 2006 from Mr. David Prager, III Tribal Attorney representing the interests of the Prairie Band Potawatomi Nation. The letter pertains to a route C of the 42nd Street alignment of the South Lawrence Trafficway (SLT).

Mr. Prager's letter requests that route C be considered when laying out the Wakarusa Water Reclamation Facility so as not to eliminate this potential alignment from consideration. As you are aware, this site was selected for the Wakarusa Water Reclamation Facility for many factors, including flexibility and neutrality to proposed SLT alignments. We have reviewed the site planning to date and the enclosed figures reflect route C, which was incorporated into our graphic by visual observations of landmarks. The initial construction area for the 7 mgd plant can be located so as to have no impact on routes A, B (which cross the proposed site at the same location), or C of the SLT. We can even plan for an initial plant expansion to the northeast in a linear fashion and still maintain viability of all three potential SLT routes, thereby deferring any definite route selection until the population of the City reaches approximately 200,000 people, or just more than twice its existing size. Then, we would need direction on the SLT location in order to plan for future expansion phases.

We are nearing completion of the process component sizing and will be meeting with staff in the near future to select the desired process steps. The development of the site plans will accommodate routes A, B & C of the SLT. We will contact Helmer Engineering, which developed route C, as well as KDOT to obtain available horizontal control for the proposed routes to indicate their locations.

City of Lawrence
Lawrence, Kansas
Wakarusa Water Reclamation Facility

B&V Project 145333.200
October 31, 2006

If you have any questions or would like to discuss this issue in more detail, please feel free to contact us.

Sincerely,

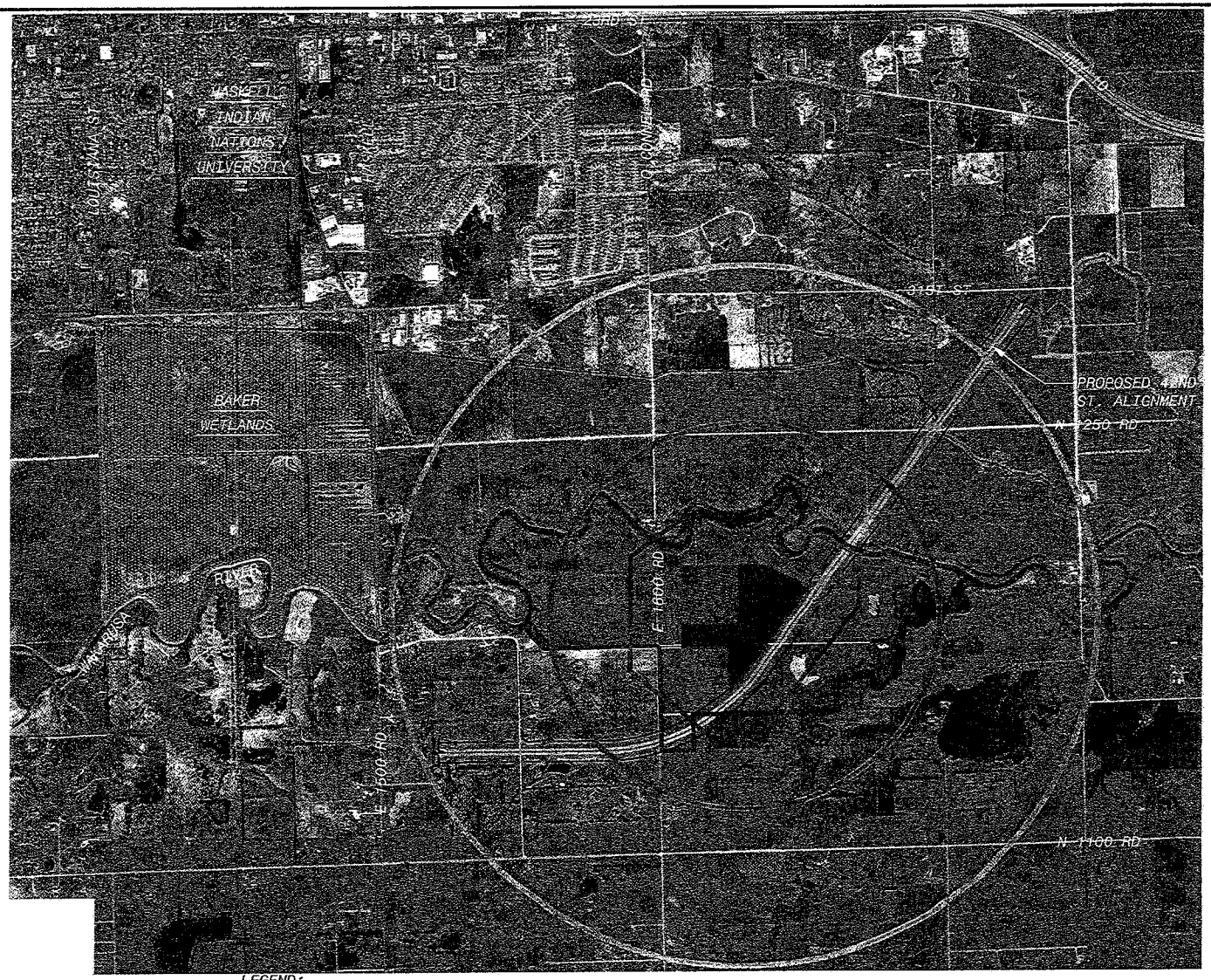
BLACK & VEATCH CORPORATION

Michael G. Orth
Associate Vice President

Enclosures

cc: Dave Wagner, w/enclosures

Exhibit C



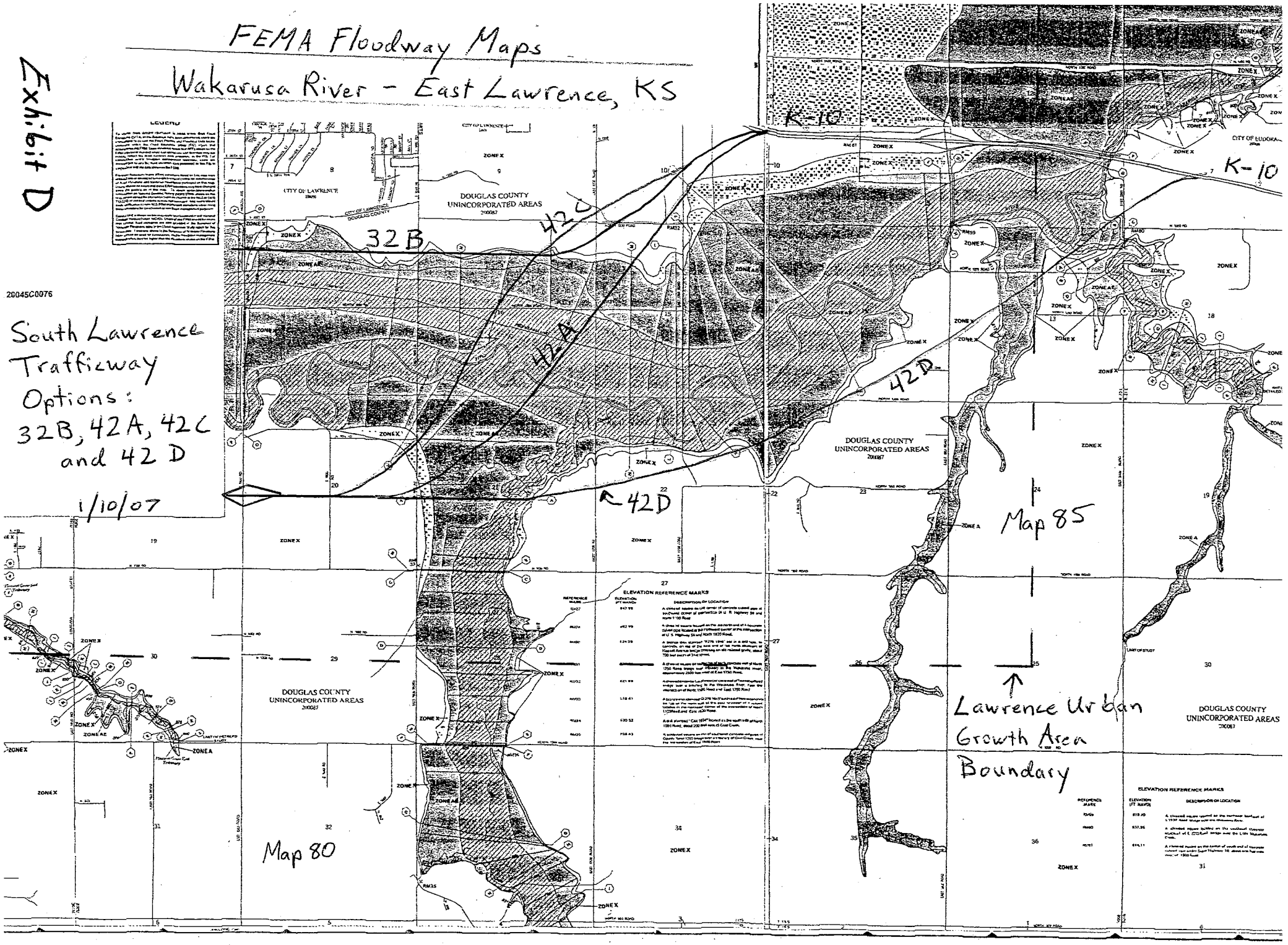
BLACK & VEATCH Corporation
Kansas City, Missouri

LAWRENCE, KANSAS
WAKARUSA WATER RECLAMATION FACILITY
BLACK & VEATCH
2006

Exhibit D

FEMA Floodway Maps

Wakarusa River - East Lawrence, KS



Prairie Band Potawatomi Nation

Tribal Attorneys Office
Tribal Government Center
16281 Q ROAD
MAYETTA, KS 66509

David Prager, III
Tribal Attorney
(785) 966-4030
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E-mail: dprager@pbpnation.org

January 30, 2007

Wendall L. Meyer
Assistant Division Administrator
Federal Highway Administration
6111 S.W. 29th St., Suite 100
Topeka, KS 66614

Re: Draft Section 4(f) Evaluation for the South Lawrence Trafficway ("SLT").

Dear Mr. Meyer:

In my January 19, 2007 letter to you, I explained several serious problems with the draft Section 4(f) evaluation (the "Evaluation"). This letter follows up on some of those issues.

The Evaluation failed to reasonably analyze the comparative noise impacts of 32B and 42A with respect to the Haskell Farm and elsewhere. The high noise levels for 32B were stated to be above or near the legal limits. Obviously, at those high levels, the noise level for 32B will exceed the noise for 42A at such locations in the Haskell Farm, with these high 32B noise levels radiating out north and south along the 32B route. Under 32B there would also be high levels of traffic on relocated Haskell Ave. near the Haskell Farm traveling to and from the 32B/Haskell Ave. interchange and there would be traffic on the relocated Louisiana St. west of the Haskell Farm. All of this Haskell Ave. and Louisiana St. traffic under 32B would have some impact on the Haskell Farm and on new wetland areas that are proposed for that route. None of these impacts were analyzed or discussed in the Evaluation.

In addition to exaggerating the noise impacts for 42A and ignoring them for 32B, the Evaluation fails to quantify and locate the alleged (or ignored) noise impacts from 32B, 42A, 31st St., Haskell Ave. and Louisiana St. If these noise impacts are not quantified, it is not possible to determine whether they are material or how they weigh in the balance in comparing 32B and 42A. In particular, noise level maps must be prepared for both 32B and 42A showing the noise levels (after additional reasonable mitigation for 42A) throughout the entire Haskell Farm and

from 31st St., Haskell Ave. and Louisiana St. Baseline maps must also be prepared in order for the incremental additional noise from 32B and 42A to be determined.

The FHWA has defined that a traffic noise impact occurs when predicted traffic noise levels substantially exceed the existing noise levels. KDOT's Policy Statement on Highway Noise Abatement states that when predicted noise levels exceed existing noise levels, the following values from KDOT's Policy are applied to determine the degree of impact:

No impact	0-5 dBA increase
Minor impact	6-10 dBA increase
Moderate impact	11-15 dBA increase
Severe impact	greater than 15 dBA increase

For both 32B and 42A, in order to understand the level of impact, your noise analysis will need to map out the entire Haskell Farm and nearby affected areas along 31st St., Haskell Ave. and Louisiana St. showing each of these zones of noise increase from existing levels (0-5, 6-10, 11-15 and greater than 15). It should then become evident that the 32B noise impacts are severe for at least the entire northern half of the Haskell Farm. In addition, the noise maps should also show noise contours based upon the state Noise Abatement Criteria, including both 56 and 66 L(eq).

Your evaluation also omitted an analysis of the exhaust emission, oil and vibrational impacts from 32B traffic through the Haskell Farm, which must be included.

In light of the omissions of the 42C and 42D alternatives from the Evaluation and its numerous additional errors, I request that the evaluation be redrafted, that the initial draft be corrected, and that the resulting new draft evaluation be open to additional time for public consideration and comment. Please inform me in writing as to whether you agree to do this. I also request that this letter be included in your administrative record for purposes of the Section 4(f) evaluation. Please confirm to me in writing that it will be included or, if applicable, explain in detail why you will not include it.

Sincerely,

David Prager, III

David Prager, III

JMD, WLM, [illegible], ERF (Last)

Letter No. 228

Prairie Band Potawatomi Nation

Tribal Attorneys Office
Tribal Government Center
16281 Q ROAD
MAYETTA, KS 66509

David Prager, III
Tribal Attorney
(785) 966-4030
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E-mail: dprager@pbpnation.org

February 1, 2007

Wendall L. Meyer
Assistant Division Administrator
Federal Highway Administration
6111 S.W. 29th St., Suite 100
Topeka, KS 66614

Re: Draft Section 4(f) Evaluation for the South Lawrence Trafficway ("SLT").

Dear Mr. Meyer:

In my January 19, 2007 letter to you, I explained several serious problems with the draft Section 4(f) evaluation (the "Evaluation"). This letter provides more information on some of the issues.

The only two noise studies I have are the July 2002 and November 2002 studies from URS. On which studies are you basing the Evaluation noise analysis?

I have examined the noise studies for the SLT, which are defective in several additional respects. First, the devices use to detect sound were improperly located. On the east side of Louisiana St. south of 31st St., device(s) were placed close to Louisiana St. on the *west* side of the dike that runs along the Haskell Farm's west side. Consequently, the existing and projected sound readings are distorted and excessively high in the sound studies. If these detector(s) were place roughly 25 yards further east, they would be behind the dike, and the readings at the device(s) and the extrapolation of sound levels around them would be much lower. In a similar manner, devices were placed 1) north of the dike running from Louisiana St. to Haskell Ave. south of 31st St. and 2) close to Haskell Ave. on its west side south of 31st St. In all of these instances, placing the devices near the streets and outside of the existing exterior dikes and tree line sound barriers gave existing readings and resulted in extrapolated existing readings not representative of the otherwise very large interior of the Haskell Farm property south of 31st St. Further, projections of future noise at all these devices would be similarly

unrepresentative of noise levels on the vast majority of the Haskell Farm lying on the inside of these dikes and tree lines in the area south of 31st St.

The projections of future noise levels with respect to these sections of 31st St., Haskell Ave. and Louisiana St. must have been based upon estimated traffic levels. Please provide me with a copy of the documents that you have showing these future traffic estimates. Because no future traffic projections apparently exist for 32B and 42A for Louisiana St. and Haskell Ave. south of 31st St., I do not see how the future noise levels could be projected.

The projected noise levels for the Haskell Farm north of 31st St. are also distorted by the Evaluation's refusal to provide sound barrier mitigation (berms and vegetation) north of 31st St. for the 42A alternative. Both the Haskell Indian Nations University and the National Congress of American Indians have submitted resolutions in opposition to the 32B alternative.[1] Thus, the current owners of the Haskell Farm property north of 31st St. and the primary constituency historically connected to it are on record in opposition to 32B and in favor of the route south of the river. The Evaluation has done nothing to accommodate this constituency by providing mitigation for this area under 42A.

The Evaluation and URS's noise studies are also defective because they fail to project noise levels and determine impacts on the 32B alternative both 1) between unrelocated Louisiana St. and Iowa St. and 2) east of relocated Haskell Ave. For both of these stretches, the sound from 32B would especially impact commercial, residential and other property located north of this alternative. The sound from 32B will also impact the Prairie Nature Center very near and northeast of the Haskell/32 B interchange. The Prairie Nature Center is a federally funded 73 acre environmental educational facility and natural area for which impacts must be determined.

I request that this letter be included in your administrative record for purposes of the Section 4(f) evaluation. Please confirm to me in writing that it will be included or, if applicable, explain in detail why you will not include it.

Sincerely,

David Prager, III

David Prager, III

[1] Haskell Board of Regents Resolution No. 2003-04; NCAI Resolution No. EWS-02-003.

APPENDIX E-6
Educational Facilities' Comments

Letter No. 121

K-STATE
Kansas State University
Office of the President
110 Anderson Hall
Manhattan, KS 66506-0112
785-532-6221
Fax: 785-532-7639

December 20, 2006

Mr. Wendell L. Meyer
Assistant Division Administrator
Federal Highway Administration
Kansas Division Office
6111 SW 29th Street
Topeka, KS 66614

Dear ~~Mr. Meyer~~ Wendell,

I am writing to express Kansas State University's support for the South Lawrence Trafficway. Kansas State University, located in Manhattan, and the University of Kansas, located in Lawrence, are among the top 94 universities nationally according to the rankings of the Carnegie Foundation.

Both K-State and KU are among only 4% of the 2,186 public and private institutions across the country in the category called "research universities–very high research activity." The two institutions and the University of Kansas Medical Center exceed $400 million annually in research dollars spent in Kansas. These three institutions are an enormous economic engine for the entire state of Kansas.

I understand one of the proposed alternatives is the 32nd Street Alternative. I would like to add my support for this alternative, as it is the only "feasible and prudent" option.

Please accept this letter of support for the South Lawrence Trafficway 32nd Street Alternative. Thank you.

Sincerely,

Jon Wefald
President

dh

P.O. Box 65
Baldwin City
Kansas 66006-0065
913-594-6451
Administrative Fax:
913-594-2522
Library, Faculty Fax:
913-594-6721

Letter No. 167

BAKER UNIVERSITY

29 December 2006

Mr. Wendell L. Meyer
Assistant Division Administrator, FHWA
Kansas Division Office
6111 SW 29th Street
Topeka, Kansas 66614

Dear Mr. Meyer:

As Director of Natural Areas for Baker University I am responsible for managing the Baker Wetlands. I have been responsible for management of our Wetlands since 1982. When I became manager we were cultivating 253 acres and leased 270 acres for pasture. Except for a narrow window of time in the spring, the area was not wet and appeared much like the land to the east and west of the current Baker Wetlands. We have been able to restore this area so that about 80% of the property is functional wetlands.

I believe that the proposed 32nd St alignment B of the South Lawrence Trafficway is the only prudent and feasible route when compared to alternative 42nd St. alignment. Construction of the 42nd St alignment will be significantly higher in cost and will stimulate a dramatic increase in urban sprawl south of the river. This will have a much greater long-term negative impact on the historic property than the 32nd St alignment for several reasons. Development south of the river will ultimately require that both Louisiana and Haskell avenue be widened to 4 lanes. In addition, the remaining 31st St will also need to be extended to the east of Haskell as well as widened to 4 lanes. Four lane roadways on 3 sides of the Baker Wetlands will generate much more noise and disturbance than constructing the SLT on 32nd St.

Opponents have long argued that the 32nd St alternative and associated noise walls will bisect the historic property into 2 separate parcels, prevent access from the campus, and will destroy the historic vista of the historic property. These are incorrect assumptions. The current 31st St has effectively divided the historic property since 1971. The access road from the HINU campus has been under water since August 2003 so there has not been pedestrian access for over 3 years. The large number of cottonwoods and dense brush along the north levee of the Baker Wetlands has effectively disrupted the historic vistas since the 1950's.

With construction of the 32nd St alignment and its associated noise walls and expanded wetland mitigation and visitor's center access will be greatly improved for HINU and the public, yet the solitude of the southern portion of the wetlands will be retained. Oral history indicates that clandestine meetings with parents and participating in religious practices was carried out along the river banks, not along the northern areas where the 32nd St alignment would be located. The funding and substantial buffer zone created by the mitigation plan will ensure long-term protection and management of the area. It is very gratifying that so many feel the Wetlands are such a "treasure", since prior to my restoration of the area in the early 1990's it was still cultivated land with patches of upland prairie vegetation and extensive weedy areas. I would like to think that someone like myself, with a long, extensive history and expertise of the Wetlands would have

the ability to determine what is in the best interest for its future.

There are several discrepancies in the Draft Section 4(f) Evaluation that I would like to bring to your attention:
4f-33 – the document correctly indicates that the entire western dike has previously been modified. Likewise, much of the eastern dike has been modified when the bridge on Haskell Ave. was rebuilt by the county in the mid 1970's.
4f-34 – for some reason the total of 317 acres of created wetlands does not correlate with the 304 acres used in all other references in the document as well as the KCD 404 Permit.
4f-36 – No-Action alternative will most likely make it much more difficult for pedestrian and vehicular traffic to access the Baker Wetlands from 31st St.
4f-38 – I am no longer Professor and Chair of Biology at Baker. I am currently Senior Professor of Biology and still Director of Natural areas.
4f-46 – I would question the feasibility of maintaining access to the new alignment of 31st St by way of the N-S road in the center of HINU campus. The current bridge is not structurally sound and being an historic structure, can not likely be modified. Constructing a new bridge to the east would needlessly disrupt the historic nature of the canal and levee. Since this access road has not been used in recent memory, maintaining this link seems inconsistent with the values being expressed by Native Americans.

Again, on behalf of Baker University, I strongly urge the FHWA to choose the 32nd Street Alignment as the most prudent and feasible alternative for the South Lawrence Trafficway.

Sincerely,

Roger L Boyd

Roger L. Boyd, Ph.D.
Senior Professor of Biology
Director of Natural Areas

THE PRESIDENT

1858
BAKER
UNIVERSITY

January 8, 2007

Mr. Wendell L. Meyer
Assistant Division Administrator, FHWA
Kansas Division Office
6111 SW 29th Street, Suite 100
Topeka, KS 66614-4271

Dear Mr. Meyer:

As the new president of Baker University, I have taken seriously the University's responsibility regarding the Baker Wetlands. I appreciate your taking the time to accept letters commenting on the proposed routes of the South Lawrence Trafficway.

Much time has been spent by the University to determine the most favorable route and it is our belief that the 32nd Street alignment would be least likely to disrupt the Wetlands themselves and would minimize disturbance to the Haskell Agricultural Farm Property. This route would also have the best potential to reduce future impacts from encroachment by development and noise from increased traffic.

The proposed mitigation for the 32nd Street alignment will provide a buffer through greatly increasing the acreage of restored wetlands, improved access, and initiate the ability to better educate the public about the benefits of wetlands through the construction of the visitors' center. The provided funding will ensure that the Baker Wetlands will be available for public enjoyment for many years to come.

It is my understanding that the construction of the 32nd Street alignment will not impact the primary historical features of the HAFP, the two native wet meadows, or the most remote and secluded areas which are most commonly used for meditation by HINU students and other members of the public.

I firmly believe that the construction of the 32nd Street B alignment and associated mitigation plan will provide the greatest potential for long-term protection of the HAFP and the Baker Wetlands.

Sincerely,

Patricia N. Long

Patricia N. Long

tm

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APPENDIX E-7
Organization's Comments

December 7, 2006

Mr. Wendall Meyer
Assistant Division Administrator
FHWA Kansas Division Office
6111 SW 29th St.
Topeka, KS 66614

Dear Mr. Meyer,

The Kansas Association of REALTORS® is a trade association representing over 10,000 real estate professionals in the state of Kansas, including over 400 members in the Lawrence area. I am writing in response to your request for public comments regarding the Draft Section 4(f) evaluation of the South Lawrence Trafficway ("SLT").

Kansas Highway 10 ("K-10") indirectly connects the cities of Topeka and Lawrence with the greater Kansas City area. This area is integral in the development of the future transportation and industrial corridor between Topeka, Lawrence and the greater Kansas City area. K-10 Highway is the primary transportation route connecting Lawrence and Kansas City. Under current conditions, motorists on K-10 Highway, whether traveling east to the Kansas City area or west to Topeka or Lawrence, must transition from a two- or four-lane freeway to congested city streets in Lawrence. When you combine this traffic with the existing city traffic in Lawrence, this condition contributes to increased congestion, pollution and accident rates within the city of Lawrence. As traffic pressures continue to increase with the increased economic growth being seen in the region, the deficiencies in the existing system will only continue to worsen. Something must be done on an expedited basis to finish the construction of the K-10 bypass and improve the flow of regional traffic in Northeast Kansas.

In 2003, the U.S. Army Corps of Engineers completed its Final Environmental Impact Statement and issued a decision designating the 32nd Street Alignment B as the most prudent and feasible option for the construction of the South Lawrence Trafficway. During its consideration, the Corps actively sought input from over 500 community groups including American Indian tribes, the city of Lawrence, Douglas County, area academic institutions, and members of the general public. Furthermore, the Corps exhaustively investigated multiple routes before concluding that the 32nd Street Alignment B was the most prudent and feasible option.

The Kansas Association of REALTORS® agrees with the Corps in its assessment that the 32nd Street Alignment B is the most prudent and feasible option for the construction of the remaining portion of the South Lawrence Trafficway. The 42nd Street alternative would cost $52.7 million more to build than the 32nd Street Alignment B, does not include a mitigation plan that is equal to that of the 32nd Street Alignment B and would result in greater long-term cumulative adverse impacts to the Baker wetlands.

It is imperative that the proposed 32nd Street Alignment B be adopted in order to provide Northeast Kansas citizens with a safe, efficient, environmentally sound, and cost-effective transportation system. If immediate action is not taken, the current system will continue to have an adverse impact on economic growth and traffic safety in Northeast Kansas.

Respectfully submitted,

Diane Green
2006 KAR President

December 11, 2006

Mr. Wendall L. Meyer
Assistant Division Administrator
Federal Highway Administration
Kansas Division Office
6111 SW 29th Street, Topeka, KS 66614

Dear Mr. Meyer:

The Olathe Chamber of Commerce wholeheartedly endorses the Army Corps of Engineers in its recommendation to align the South Lawrence Trafficway with 32nd Street. The Chamber joins U.S. Senator Pat Roberts, the Kansas Department of Transportation, Douglas County, and many others in supporting this alternative alignment for the eastern leg of the SLT. Finding the safest, least congested way to improve the SLT is important to Olathe and southern areas of the metropolitan area because the trafficway is part of the critical link to Lawrence and to I-70 via K-10.

Creating nearly 317 acres of wetlands to replace the 50 acres lost to construction seems like a win-win solution to soften the environmental impact of this project and, in fact, expand the wetlands. Further, the preferred 32nd Street route will cost $52 million less than any other construction option considered.

We applaud all involved with this project for actively seeking input.

Yours truly,

L. Franklin Taylor
President

pc: Sen. Pat Roberts
Tim Danneberg

OLATHE
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ONE VISION. ONE VOICE.

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SIERRA CLUB
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16 December 2006

Wendall L. Meyer
Assistant Division Administrator, FHWA,
Kansas Division Office
6111 SW 29th Street,
Topeka, KS 66614

Mr. Meyer:

I am writing on behalf of the 800 members of the Wakarusa Group of the Sierra Club to express our concerns about the many deep flaws present in your Draft Section 4(f) evaluation of the South Lawrence Trafficway, or SLT. Although you acknowledge the historic and cultural importance of the Haskell-Baker wetlands, your draft rests on the absurd notion that putting a highway *through* the wetlands will cause less damage than putting a highway *across a river* from them. Basing your arguments upon this foundation of sand leads you to make several erroneous claims.

1) **<u>You overstate the value of several so-called mitigations</u>.**

Building trails, campgrounds, and an educational center are all fine ideas, but they would offer no relief from the damage caused by the 32nd Street rout. Aside from destroying almost 60 acres of wetlands, this route would permanently degrade the remaining wetlands by forcing it to live cheek-by-jowl with a highway. Trails, campgrounds, and an educational center will not alter these facts. They will merely give people a better view of the damage. It is like tearing the Mona Lisa in half, and then claming to have fixed the situation by installing better lighting. Presenting these features as mitigations gives a false impression that the 32nd Street route causes less damage than it does. This is especially true in the context of this report on the damage to the historical and cultural significance of the wetlands. The people who will suffer most loss of cultural heritage are the faculty, staff, students, and alumni of Haskell Indian Nations University, or HINU. However, you suggest that giving an educational center to Baker University will somehow make up for the damage caused to HINU. This is unfair, untrue, and insulting.

2) **You are wrong about the visual impact of the 32nd Street route upon the wetlands.**

You state that the 32nd Street route will not visually impact the wetlands because you plan to hide the highway with a wall. That's right, a wall. How can you possibly argue that blocking the entire northern edge of the wetlands with a 12-foot high wall will not have a visual impact upon the wetlands? The fact that you would make a claim this ludicrous casts doubts upon the seriousness and objectivity of this entire report.

3) **You unfairly claim that the 42nd Street route will cause more development south of the river, and more traffic on the east and west sides of the wetlands.**

In common with previous reports, you make the improbable assertion that building the SLT along 42nd Street will cause the south bank of the Wakarusa to swarm with developers who would be daunted if the highway were built an apparently magical 10 blocks to the north. The distance between the 32nd Street and 42nd Street routes can be covered in less than 5 minutes by car, and it is unreasonable to think that such a small difference will significantly alter future development. Indeed, as you acknowledge in this report (but clearly do not allow to intrude upon your conclusions), the city of Lawrence has already zoned for development south of the Wakarusa and plans to spend tens of millions of dollars building a new sewage treatment plant to handle the waste expected to flow from this area. The Haskell-Baker wetlands will become a green island in an urban landscape if the SLT is built on 32nd Street, on 42nd Street, through downtown Baldwin City, or not at all. Our only choice is whether to maintain the wetlands as an intact island, in at least as good a shape as now, or as a maimed stump.

In short, your claim that the 32nd Street route is less harmful to the Haskell-Baker wetlands than the 42nd Street route relies upon mitigations that mitigate nothing and the belief that a distance of 10 blocks will function like an insurmountable wall to developers while an actual 12-foot-high wall will be a gauzy nothingness to people enjoying the wetlands. Naturally, we hope that you will reconsider your report in light of these glaring errors and issue a new draft that honestly assesses the true impacts of each of the proposed routes. Thank you for your attention.

Sincerely,

Michael Campbell
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Eudora, KS 66025
(785)542-3885
shamsoup@yahoo.com

Lenexa Chamber of Commerce

December 22, 2006

The Historic Lackman-Thompson Estate

11180 Lackman Road

Lenexa, KS 66219-1236

913.888.1414

Fax 913.888.3770

Mr. Wendall L. Meyer
Assistant Division Administrator
FHWA-Kansas Division Office
6111 S.W. 29th Street
Topeka, KS 66614

Dear Mr. Meyer:

The Lenexa Chamber of Commerce would like to express its strong support for the proposed 32nd Street alignment of the South Lawrence Trafficway.

We believe completion of the South Lawrence Trafficway is critical. Currently Kansas Highway 10 is routed through city streets in Lawrence, creating congested and unsafe driving conditions. A more convenient, safe, and efficient transportation system connecting I-70 with the southern Kansas City metropolitan area would provide significantly improved access to one of the state's fastest growing commercial and residential corridors.

Accordingly, we believe the proposed 32nd Street alignment is the only prudent and feasible option for achieving this goal. The mitigation plan for the 32nd Street alignment includes creation of nearly 317 acres of critical wetlands to replace the 50 acres lost to construction and, according to the Corps, is environmentally superior to the mitigation plan for a 42nd Street alignment.

In addition, the 32nd Street alignment would cost $52.7 million less to build than a 42nd Street alignment, saving the government fiscal resources that could potentially be invested in other infrastructure needs.

In summary, the Lenexa Chamber of Commerce supports the much-needed benefits that completion of the South Lawrence Trafficway would bring and we strongly encourage the Federal Highway Administration to support adoption of the proposed 32nd Street alignment plan because we believe it to be the most prudent and responsible option.

Thank you for the opportunity to join many others in providing input on this important issue.

Sincerely,

Blake Schreck

Blake Schreck
President

Letter No. 184

Lawrence Preservation Alliance

P.O. BOX 1073 • LAWRENCE, KANSAS 66044

December 28, 2006

Wendall L. Meyer

As current president of the Lawrence Preservation Alliance and a member of the board for seven years, I wish to comment on the proposed routes for the Lawrence traffic way, or bypass. It is not my intention herein to choose a preferred route, but rather, to provide a preservation viewpoint to the discussion. While this statement might well reflect the views of the board, I do not presume to accurately represent the views of every board member.

Please find as an addendum to this letter a copy of a letter LPA sent to city and county officials on May 30, 2005, detailing findings of an LPA ad hoc committee (comprised of Kate Dinneen, Mary Lynn Stuart and Karl Gridley), that studied surviving historic sites from territorial days along the Wakarusa River. It is very important to LPA that these sites are protected as Lawrence develops to the south.

The stated mission of LPA "is to preserve historically significant buildings and natural environments, and to educate the community about the benefits of historic preservation." The 32nd Street route would build through a natural environment; the 42nd Street route potentially threatens territorial sites, specifically the Meares' farmstead and Blanton's Crossing.

As you are aware, there has been voluminous and contentious discussion in Douglas County for over two decades about constructing a road through the wetlands. One aspect of the debate centers on the point that for a period of time, the wetlands were drained and diked for farming purposes. There have also been unsubstantiated claims of illicit burials there within the Haskell community during the long period when Haskell Institute's main purpose was to train young American Indians to reject their native heritage.

Lawrence
Preservation
Alliance

Regarding the wetlands/farmlands issue, preservationists, when evaluating a built environment, use a 50-year benchmark to help with decision-making. A structure 50 years or older is considered historical and given careful consideration when demolition or wholesale changes are proposed, and if it is protected with historical register status, such actions are usually denied unless it can be proven that a feasible and prudent alternative does not exist.

It has been over 50 years since the wetlands were drained for farming. Further, non-native American history does not record how long the wetlands were there prior to draining. From a preservation standpoint, the wetlands have historic significance.

Regarding the unsubstantiated burial claims, preservationists in Douglas County are currently developing an interpretive historic site at the Black Jack battlefield, east of Baldwin City. There were two efforts by professional battlefield archeologists over the last six months to recover artifacts from the site. While those efforts were largely unsuccessful and disappointing, no one is suggesting that because of this the battle could not have happened there.

The 32nd Street route also carries with it a large mitigation package. Again, speaking from a preservation point of view, a preservationist would oppose willful destruction of a historic structure for replacement with a new replica.

The 42nd Street alignment comes dangerously close to two very sensitive territorial sites, the Meares' farmstead and Blanton's Crossing. Given the wide swath of clearing necessary for construction of the western leg of the traffic way, LPA would be very concerned with a route passing near those historic sites, and would react strongly to either of those sites being threatened.

A 42nd Street route could also encourage future expansion of Louisiana and Haskell streets to four lanes, which could be problematic for these territorial sites. The location of interchanges could also be a problem, as they attract commercial development and thus require a large footprint before development is completed.

Since the costliest aspect of a south-of-the-river route is bridge construction, it would make the most sense from a preservation standpoint to locate any road construction well south of the Wakarusa, particularly between Louisiana and Haskell streets. If this or any future development threatens a historical territorial site, we would favor creation of a natural buffer and small park space as a way to preserve the historic site for the community.

Our board members who live south of Lawrence have often suggested that 1000 Road, sometimes referred to as Sibleyville Road or Wells Overlook Road, might be the best route for the traffic way to follow. As the community grows south, this route would fit more with the definition of the term 'bypass' anyway, and provide a better route for travelers going north on the new 59 highway to connect with K-10 to the east.

We appreciate this opportunity to make our comments, and we hope you give them careful consideration.

Sincerely,

Dennis Brown

Lawrence Preservation
Alliance President

Mary Lynn Stuart

Lawrence Preservation
Alliance Secretary

Kate Dinneen

Lawrence Preservation
Alliance Board

Mary Burchill

Lawrence Preservation
Alliance Board

Lawrence Preservation Alliance

P.O. Box 1073 · Lawrence, Kansas 66044

May 30, 2005

Dear Mayor Highberger:

The Lawrence Preservation Alliance Board believes that while growth in the undeveloped areas of Douglas County is inevitable, the best growth is one in which natural, agricultural and historical resources are accounted for, valued, and factored into the planning.

With this in mind, our board formed a committee two months ago to identify historically sensitive sites in the county area south of the Wakarusa River. While our inventory is ongoing and by no means complete, we have found a contiguous band of sites just south of the Wakarusa, from Louisiana to near Eudora, that in some cases go back to territorial days and that anyone planning or overseeing development in that area should be aware of. These sites include:

The Mears House, on the west side of Louisiana, an Italianate home on a family farm pre-empted in 1854, which we believe may be the oldest farm owned by a single family in the county, and perhaps the state.

Blanton's Crossing, on the east side of Louisiana, which served as a southern entry to Lawrence for early settlers. Blanton set up a toll bridge here. Current property owner Fred Six has been very active in excavating and restoring the site, which has a stone ruin which is quite likely one of the earliest structures in Douglas County, and may have a connection to the original bridge.

Oregon/California Trail-era graffiti, on sandstone bluffs east of Blanton's Crossing. This area is also the site of Branson's Rescue in November of 1855 which instigated the Wakarusa War. John Brown crossed here to enter Lawrence on December 7, 1855, and Quantrill crossed here on his way out of Lawrence on August 21, 1863.

On the west side of Haskell Road is the Kennedy family cemetery and a space called "the island" that was used by Haskell students for ceremonies.

East of Haskell Road is the site of the County Poor Farm, where red-tile outbuildings are still in evidence, and the site of Stewart's Fort, a major Underground Railroad site.

Further south from the Wakarusa sits Fairview School (1890), which is now a home, and the Leary Home. The Leary Barn (1890), is now a ruin.

East across Coal Creek are the original Twin Mounds though Blue Mound is now the most prominent of the two. These were major landmarks along the Oregon Trail, and Blue Mound was the site of a relay station connecting stations at Signal Oak north of Baldwin City and Mt. Oread.

Just above Spring Creek is Blue Jacket Crossing, where Quantrill came across to enter Lawrence. Wagon ruts are still visible here, as well as additional graffiti on bluffs.

The Lawrence Preservation Alliance is committed to the identification and preservation of territorial sites in Douglas County, as evidenced by our efforts to save the Black Jack Battlefield east of Baldwin City, Barber Schoolhouse near Clinton Lake, and our support of a private group restoring the Vinland Presbyterian Church. We are very hopeful that the proposed National Heritage Area will come to fruition in the near future. Our concern during this interim time is that historically sensitive sites that have quietly survived for close to 150 years

could be destroyed by development that doesn't take their significance into account. Our committee will continue to study this area and may share other findings with you in the future.

Sincerely,

Dennis J Brown

Dennis J Brown
Vice President
Lawrence Preservation Alliance
785-841-2460

cc: Judy Billings, National Heritage Area
Linda Finger, Planning Staff
John Haase, Planning Commission
Bob Johnson, County Commissioner
Charles Jones, County Commissioner
Jere McElhaney, County Commissioner
Craig Weinaug, County Administrator
Mike Wildgen, City Manager
Lynne Zollner, Planning Staff

LAWRENCE DOUGLAS COUNTY METROPOLITAN PLANNING OFFICE

SIXTH AND MASSACHUSETTS STREET • P.O. BOX 708
LAWRENCE, KANSAS 66044-0708 • FAX (785) 832-3160 • PHONE (785) 832-3150

Letter No. 175

January 2, 2007

Mr. Wendall Meyer
Assistant Division Administrator
FHWA Kansas Division Office
6111 SW 29th Street
Topeka, KS 66614

Dear Mr. Meyer:

I am writing to you on behalf of the Lawrence – Douglas County Metropolitan Planning Organization (MPO) with respect to FHWA's intent to adopt the EIS developed by Corps of Engineers for the South Lawrence Trafficway (SLT). It is our understanding that a federal "Section 4(f)" review process is under way because a portion of the 32nd Street alignment of the proposed SLT runs through the Haskell Institute Historic District, a 4(f) applicable property. Section 4(f) requires that prudent alternatives to a proposed roadway that affects a 4(f) property be explored.

At their meeting this week, the MPO voted 7–1 to reaffirm the position they took in earlier this year as expressed in the attached May 30, 2006 letter. The MPO is adamant that the proposed 32nd Street alignment will harm the Haskell Institute Historic District and that other prudent alternatives exist that should be pursued.

The MPO is concerned that the recent open comment period has been restricted to only two routes, the 32nd Street and 42nd Street alignments. In May, the MPO outlined an approach that this body believes to be a prudent alternative to the alignments that the discussion has been narrowed to. Therefore, it does not appear that the 4(f) process has been adequately followed, in that all prudent alternatives have not been part of the recent public discussion.

The MPO believes that there is a reasonable alternative to building a new road through the 4(f)-eligible Haskell Institute Historic District. Not only does this proposal compare favorably to demanding federal tests with respect to "prudent alternative" in the 4(f) process, it also better addresses other critical needs in our community.

Respectfully submitted,

Holly Krebs/sms

Holly Krebs
Chair, Lawrence – Douglas County Metropolitan Planning Organization

Enclosure – 05/30/06 letter

C: Kansas Department of Transportation
Lawrence City Commission
Douglas County Board of County Commissioners

May 30, 2006

Mr. Wendall Meyer
Assistant Division Administrator
FHWA Kansas Division Office
6111 SW 29th Street
Topeka, KS 66614

Dear Mr. Meyer:

I am writing to you on behalf of the Lawrence – Douglas County Metropolitan Planning Organization (MPO) with respect to FHWA's intent to adopt the EIS developed by Corps of Engineers for the South Lawrence Trafficway (SLT). It is our understanding that a federal "Section 4(f)" review process is under way because a portion of the 32nd Street alignment of the proposed SLT runs through the Haskell Institute Historic District, a 4(f) applicable property. Section 4(f) requires that prudent alternatives to a proposed roadway that affects a 4(f) property be explored.

On a vote of 7-3 the MPO approved this official letter of comment to recommend a "prudent alternative" to the completion of the SLT along the 32nd Street alignment. The MPO's alternative will have significantly less impact on the integrity of the historic district as well as less environmental and community disruption. The proposed alternative also better serves the community's industrial development and traffic safety interests.

The purpose of the SLT as stated in the EIS is "to provide a safe, efficient, environmentally sound and cost-effective transportation facility for users of K-10 Highway and the surrounding state highway system and, to the extent possible, alleviate congestion on Lawrence city streets." The MPO's alternative also addresses this purpose.

The suggested alternative. The MPO proposes a two-part approach as an alternative: (1) to address regional traffic needs, connect I-70 to K-10 with a six-lane bypass to the East of Lawrence (along Noria Road or further East), and (2) to address local traffic needs, create an arterial along 31st Street, connecting it to the existing Western leg of the SLT. The entire length of this roadway would have limited access with speeds appropriate to an arterial, and with roundabouts or other at-grade traffic control devices that facilitate smooth traffic flow. Ideally, these improvements should be completed after the completion of the eastern bypass to avoid drive-through traffic in the city and near the historic district.

A brief history of the MPO's alternative. The MPO's alternative is not a new idea. In 1977 the City of Lawrence adopted a Comprehensive Plan (Plan 95) with a provision for a beltway to address community needs. This beltway extended along the eastern and western edges of the city and was connected by a segment south of the Wakarusa River. The eastern leg spanned the Kansas River connecting I-70 to K-10 (the eastern bypass). The western leg did not connect to I-70. Clearly, this road system was envisioned to divert drive-through traffic to the east of Lawrence while providing a strategic arterial for local traffic around the southern portion of the community.

However a different project was conceived and partially funded in the mid to late 1980's—the SLT. At that time, the SLT was conceived to achieve three important local-traffic outcomes: (1) provide an efficient transportation corridor from west Lawrence to K-10 on the east; 2) relieve congestion on 23rd Street; and (3) attract substantial amounts of state and federal highway funds. [However, a subsequent traffic simulation by KDOT revealed that the SLT, completed along any alignment, would not provide material relief to 23rd Street traffic congestion.]

An Eastern Bypass is included in the community's current long range transportation plan,T2025, along with the SLT. The MPO has reconsidered its position on the SLT in light of changing development potential south of Lawrence, changes in the highway funding formula, and because of the more rigorous requirements of the 4(f) process when evaluating possible alternatives to projects that affect 4(f) properties.

Impact of the 32nd Street alignment on the Haskell Institute Historic District. The four-lane 32nd Street alignment has significant adverse impact on the Haskell Institute Historic District. While mitigation measures are proposed in the EIS, the MPO does not consider them sufficient to maintain the integrity of this district. As proposed, the historic district will be divided by a much wider and heavily traveled road project than exists currently. The project includes the relocated 31st Street adjacent to a new 32nd Street 4-lane highway. Along with the buffer walls, these projects will effectively cut off the southern from the northern portions of the historic property. The walls and roadways will also disrupt the visual and environmental unity of the historic district and separate the historic farming structures from land they have been connected with.

The wetland portion of the historic district has in the recent past functioned as a natural preserve for numerous species of wildlife and flood control. These functions require large tracts of land. By reducing the size of the larger wetland property, the integrity and functionality of this area will most certainly be seriously compromised.

The current plans for mitigated areas do not address the fact that the historic Baker wetlands and HINU lands are the best and the most storied natural wetlands in the region. The wetlands have proven so difficult to farm over the years that they were allowed to revert back to their natural state. The proposed wetland mitigation areas are certainly a lesser alternative. Further, by allowing regional truck traffic as well as local traffic on the 32nd Street alignment, it is the MPO's opinion that the area will experience more negative environmental impacts than if only local traffic primarily travels through the area.

Impact of the MPO's alternative on the Haskell Institute Historic District. The MPO's proposal to keep 31st Street in its current roadway allows the historic district to exist as it does now, with one large unit to the south and a smaller (HINU) unit to the north. Disruption will be negligible compared with the 32nd Street alignment. The Eastern Bypass element will not affect the historic district.

Haskell Indian Nations University has documented that 31st Street has a significant impact on their campus and student access to the Baker Wetlands. Without reciting the troubling history of Haskell, the MPO agrees that accommodating historical, cultural, and spiritual concerns about roadways affecting the campus and historic district is warranted. The MPO recommends that mitigation funding should be provided to ensure that 31st Street, along the southern boundary of the Haskell campus, is designed in keeping with the vision of the Haskell leadership. Pedestrian access from the Haskell campus to the Baker Wetlands under 31st Street should also be ensured.

Impact of the MPO's alternative on other important regional and local aspects. Other than the reduced impact on the Haskell Institute Historic District, the MPO believes that its two-part alternative better addresses:
--economic development
--future transportation issues
--environmental impact
--community disruption
--traffic safety

Economic development. Economic development and transportation planning were addressed in SAFETEA-LU with the addition of the following element, "... promote consistency of transportation plan and transportation improvements with state and local planned growth and economic development patterns."

The K-10 Corridor, between Lawrence and Metropolitan Kansas City, is perhaps the most promising economic development area in the State of Kansas. The University of Kansas and the City of Lawrence are poised to play a significant role in influencing this development. It is imperative that transportation planning anticipates and supports economic development initiatives.

The City of Lawrence has several hundred acres of potential economic development sites along its **eastern edge**. An eastern bypass, which would provide these sites access to the K-10 corridor and to I-70, would significantly increase economic development potential.

Future transportation issues. US-59 between Ottawa and Lawrence is being upgraded to a 4-lane freeway. This will certainly impact land use patterns along this roadway, increasing trips in and out of Lawrence and increasing commercial traffic with easterly and westerly destinations. An eastern bypass, located in close proximity to Lawrence, could provide for future connectivity to US-59 if extended south. This system enhancement would not only improve the economic development potential along the US-59 corridor, it would reduce local traffic congestion on South Iowa Street in Lawrence.

The metropolitan Kansas City area is rapidly transitioning into an inter-modal freight distribution center. Plans are underway to develop a facility near Gardner, Kansas. Freight will arrive by rail from west coast ports and will be further distributed by truck. Projections indicate that 2,000 truck trips will be generated daily. A similar facility is being developed by Kansas City Southern Railroad. In support of this project over $1.5B has been invested to improve the largest port in Mexico as well as the rail transit system connecting it to Kansas City. $300M is being invested by private interests to redevelop Richard-Gebaur Air Base into a freight distribution center. These projects are likely to add substantial truck traffic to the regional highway system. Containing this traffic on the established freeway network would best serve local communities. Distributing a portion of this traffic along the SLT would amplify the negative effects of the proposed roadway.

Environmental impact. An Eastern Bypass will require a bridge over the Kansas River, and this will have its own environmental impacts. However, several environmental groups have indicated a willingness to accept a Kansas River Bridge in lieu of all other alternatives proposed in the Corps' EIS. As for the local traffic aspect of the alternative, improving 31st Street will affect the Baker wetlands to a minor extent compared with the 32nd Street alignment.

Community disruption. Construction of the SLT has been a contested issue for two decades, and the issues go much deeper than "not in my back yard" arguments. Social justice with regard to Native Americans in our community has been an important concern in this project and in our community's history. While any roadway alternative will cause some level of community disruption, the MPO's alternative provides a solution to regional and local traffic problems that significantly reduces important environmental, social, and historic issues that have divided the community.

Traffic safety. Recent federal legislation, SAFETEA-LU, has escalated the importance of addressing safety related issues in transportation planning. The SLT would provide efficient traffic flow between southern Johnson County and Shawnee County but mix with local traffic in Lawrence. There is also the possibility that Lawrence would see even more drive-thru traffic if drivers choose a K-10/ I-435 route to and from Kansas City to avoid congestion along I-70 in Kansas City. Separating drive-through and local traffic is in the best interest of traffic safety. Having local traffic operate at the lower speeds appropriate for an arterial will also increase safety.

As for regional traffic, concerns about capacity are escalating. A recent KDOT study reported that by 2030 the portion of K-10 immediately east of Lawrence will require six lanes. Traffic on I-70 is projected to double by 2030. The need to connect K-10 and I-70 is undeniable.

Cost. The SLT's EIS eliminated consideration of an Eastern Bypass early in the process of considering alternatives, due to excessive cost. While the MPO concedes that the cost will be significant, it will not be extraordinary in comparison to the cost of providing comparable regional functionality to the SLT.

Currently approximately 8 miles of a 2-lane SLT have been completed west of Lawrence. The proposed eastern leg is approximately 4 miles, with a total project length of 12 miles. An eastern bypass would extend approximately 4 miles between K-10 and I-70.

The SLT from I-70 to K-10 is over 300 percent longer than an eastern bypass, and only 2 lanes have been constructed on less than two-thirds of the currently proposed route. Assuming 6-lanes by 2030 and controlled, grade-separated access at all road connections, the costs will be substantial. Alternatively a 6 lane eastern bypass would have substantially fewer lane miles, requiring fewer funds for that aspect of the project which could help offset the cost of constructing a bridge over the Kansas River. In addition, the MPO's alternative eliminates the costs of expensive grade separated access on the southern arterial. We encourage the FHWA to investigate the fiscal impact of the proposed alternative in contrast to the planned SLT.

Funding. The eastern bypass includes a Kansas River Bridge and a connection to the Kansas Turnpike, creating a regional road network. The MPO suggests that KDOT explore all reasonable alternatives for funding this connection.

Because the highway funding model has changed, it is likely that substantial local funding will be required to complete the SLT and integrate it into the road

network. While local funding will also be required for improvements to create a southern arterial, these funds will be significantly less than for the SLT.

Conclusion. In 1971 the U.S. Supreme Court ruled that a federal determination of "no feasible and prudent alternative" must cite unique problems or unusual factors involved in the alternatives or that the cost, environmental impacts, or community disruption resulting from such alternatives reach extraordinary magnitudes.

The MPO believes that there is a reasonable alternative to building a new road through the 4(f)-eligible Haskell Institute Historic District. Not only does this proposal compare favorably to demanding federal tests with respect to "prudent alternative" in the 4(f) process, it also better addresses other critical needs in our community.

Respectfully submitted,

Holly Krebs
Acting Chair, Lawrence – Douglas County Metropolitan Planning Organization

Copy: Kansas Department of Transportation
Lawrence City Commission
Douglas County Board of County Commissioners

January 17, 2007

Wendall L. Meyer
Assistant Division Administrator
Federal Highway Administration
Kansas Division Office
6111 SW 29th Street, Suite 100
Topeka, KS 66614-4271

Jayhawk Audubon Society

Re: Project 10-23 K-8392-01 (The South Lawrence Trafficway [SLT])

Dear Mr. Meyer:

On behalf of the Board of Directors of the Jayhawk Audubon Society, I wish to submit the following comments regarding the above-mentioned proposed project:

I. Flawed and Erroneous Assumptions:

a. As stated on page 4f-12, "The original UGA boundaries were a factor considered by KDOT in its selection of a Preferred Alternative north of the river and by the Corps' Kansas City District in its identification of a Selected Alternative." On several occasions, "containing urban sprawl" was given as a reason to keep the SLT north of the river. Although the process for selecting a preferred alternative for the SLT has been lengthy, foresight by the Corps should have anticipated the level of growth predicted for south of the river (approximately 20,000 residences by the year 2025).

b. Recent votes by the City of Lawrence Commissioners and the Metropolitan Planning Commissioners signal that a significant portion of Lawrence/Douglas County leaders no longer support the 32nd Street alignment. In light of those votes and especially the decision to site a large wastewater treatment plant south of the Wakarusa River demonstrate that one of the dominant premises upon which the 32nd Street alignment was chosen is fatally flawed. The Corps' FEIS is seriously out of date and FHWA should take these circumstances into consideration rather than adopting the Corps' recommendations.

c. Similarly, one of the reasons given to reject a south of the river alternative is stated on 4(f)-39: "The 42nd Street Alignment A alternative would greatly increase the accessibility of this area (south of the river) and would likely add significant development pressure for both residential and commercial uses." However, when examining Exhibit 4f-10 [32nd Street Alignment] and Exhibit 4f-11 [42nd Street Alignment], both maps indicate the same number and location of interchanges: at US 59, at Haskell Avenue, and at K-10 east of Lawrence. Unless there are other intersections/interchanges that are planned and not shown on the maps, **both alternatives provide the same access to the area south of the river.** Regardless of the alignment of the SLT, north- and south-bound traffic across the river will have to be accommodated at some time in the future, given that south of Lawrence is anticipated to be one of two directions for the city to grow.

d. **The alignment of the SLT will not be the controlling factor for increased development south of the river – it will be the construction and completion of the Wakarusa Wastewater Reclamation Facility, which is currently proceeding and expected to be in service by 2011. Therefore the following statement:** *"it [42nd Street alignment] would result in greater long-term cumulative adverse impacts to the Haskell Agricultural Farm Property than an alignment traveling through the Haskell Agricultural Farm Property. This comes from increase in generated traffic on adjacent roads, and development immediately adjacent east and west of the Haskell Agricultural Farm Property."* (Page 4f-37) **is faulty reasoning at best and certainly overlooks land-use policies stated in Horizon 2020.**

II. Land-use Policies:

a. Exhibit 4f-7 shows the 100-year floodplain along the Wakarusa River. It includes the areas west and east of the Baker Wetlands also part of the historic Haskell Agricultural Farm Property. Another reason for rejecting the 42nd Street alternative is that it *"will not provide any protection from future development and its associated traffic in the vicinity of the Haskell Agricultural Farm Property."* (page 4f-37) Again referring to Horizon 2020 (4f-39) the future land-use policy states: "Land that has been designated as either Floodway or 100-year Floodway Fringe is not recommended for urban development .... Floodplain areas are appropriate for agricultural uses and for green space recreational uses such as bike/walking paths and parks." **Therefore, if the Lawrence/Douglas County Metropolitan Planning Commission, the Lawrence City Commission, and the Board of County Commissioners adhere to their stated land-use policies, the areas west and east of the Baker Wetlands should be afforded some protection from intensive and intrusive development.**

III. Impacts on Historic Sites and Educational Uses:

a. Jayhawk Audubon Society agrees with your assessment that the 32nd Street Alignment B *"will have a direct adverse impact on the Farm Property."* Because it appears to be nearly impossible to mitigate these adverse impacts to historic sites, the only discussion in the draft 4(f) refers to attempts to maintain "open views" and provide for noise abatement. Clearly damage to land that has national significance as part of Native American history should be avoided. All other reasonable and prudent alternatives must be thoroughly studied and then select from one that does not include such impacts.

b. Regretfully, nowhere in the 4(f) document could we find a reference to the public's historic use of the Baker Wetlands for educational purposes. From the earliest times after our chapter was founded in 1970, the wetlands have been a place for field trips and other educational related activities.

c. Jayhawk Audubon Society cooperated with Baker University for many years to sponsor the annual Baker Wetlands Field Days on the last Sunday in April. More than 400 persons attended these events each year. They learned at each of the stations about the value of wetlands and the wildlife and plant species that occur there.

d. More recently, JAS has responded to the needs of local school districts, which have experienced declining financial support for field trips, by instituting a new program whereby a portion of our annual budget is used to provide transportation and volunteers to accompany elementary students to the Baker Wetlands. We believe that the 32nd Street alternative will have serious adverse impacts both long-term and short-term because much of the students' field work takes place on or near the current boardwalk. If the 32nd Street alternative is built, perhaps a whole generation of students' understanding of the value of wetlands will be stolen from them while waiting for the "mitigation" area to attain significant ecological diversity.

Thank you for your careful consideration of these comments.

Sincerely,

Chuck Herman

Chuck Herman, President

APPENDIX F
Traffic and Noise Related Information

Kansas Department of Transportation

TO: Corky Armstrong, P.E., Road Design Engineer

FROM: David Schwartz, P.E., Statewide Planning Engineer DJS

DATE: March 20, 2007

SUBJECT: Additional Forecasted Link Volumes for SLT (10-23 K-8392-01)

Below please find additional requested volumes for the South Lawrence Trafficway (SLT) project. These forecast volumes were derived from the same travel demand model as those provided to the original Environmental Impact Statement, namely the 1998 Lawrence-Douglas County QRS II model, which is still the current endorsed travel model for this metropolitan area. The process for deriving this numbers is consistent with the forecast process for the original EIS.

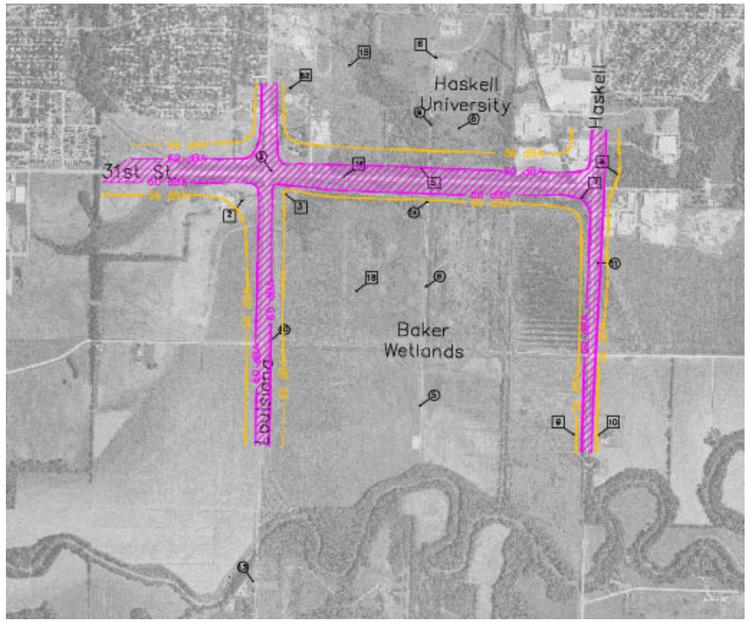
Three model scenarios were used for the analysis: a scenario where nothing was constructed in the study corridor (No-Build), one where the SLT was constructed along 32nd Street, and one where the SLT was constructed along 42nd Street. The link geometry for these scenarios accurately reflects the roadway configurations for each of the study alternatives. These scenarios were run with both 1998 (calibrated) volumes and forecast 2025 land use.

No-Build	1998	2025
Louisiana: 31st to Wakarusa R.	800	14400
Haskell: 31st to Wakarusa R.	3000	15200
31st St: La. to Haskell	12800	25900

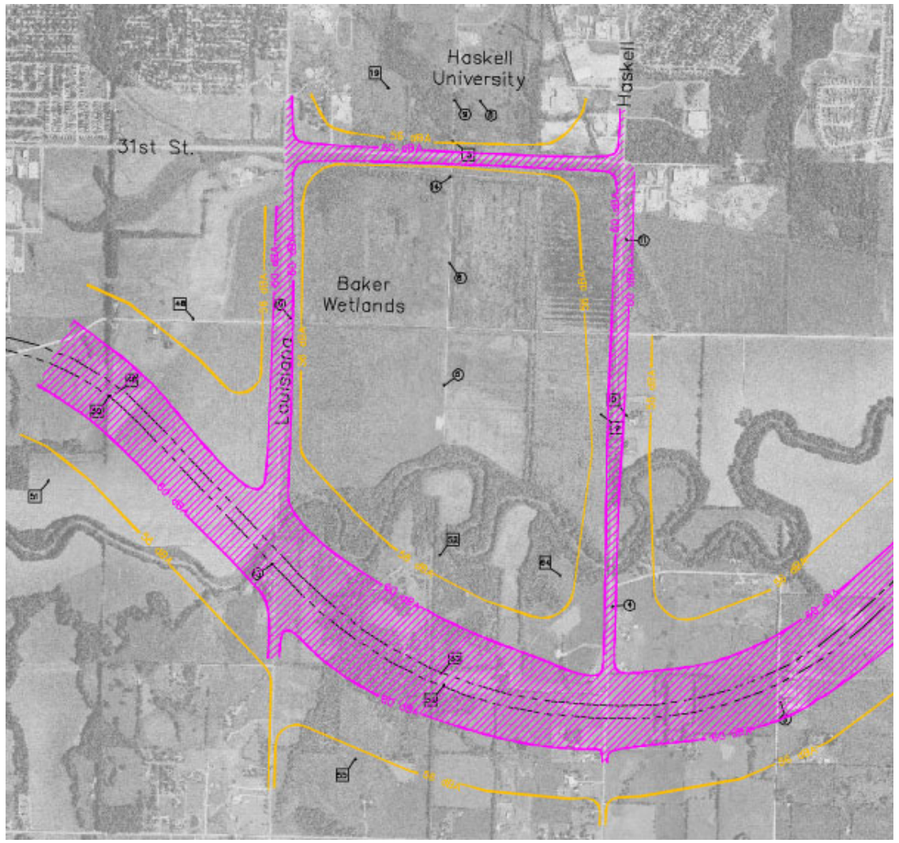
32nd St. Alignment B	1998	2025
Louisiana: 31st to Wakarusa R.	1000	15900
Haskell: S of SLT interchange to Wak.	2200	16700
31st St: La. to Haskell	7900	19500

42nd St. Alignment A	1998	2025
Louisiana: 31st to Wakarusa R.	700	16000
Haskell: 31st to SLT	5100	20900
31st St: La. to Haskell	6600	19600
Haskell: S of SLT interchange	3700	17800

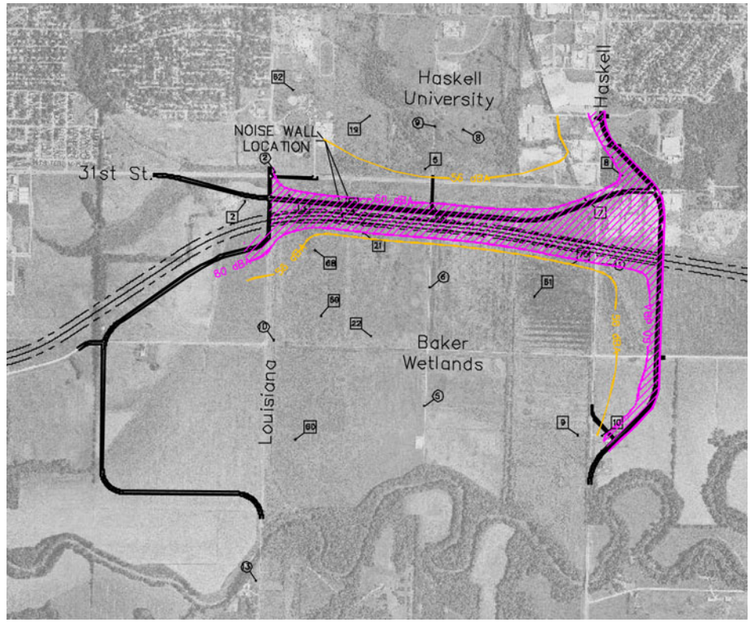
No-Action Condition



42nd Street Build Condition



32nd Street Build Condition with Noise Walls



LEGEND

- SLT Location
- dBA — 60 dBA Noise Contour
- dBA — 56 dBA Noise Contour
- Field Receptor Location
- Modeled Receptor Location

N

HNTB

K-10 SOUTH LAWRENCE TRAFFICWAY

Sound Level Contours

APPENDIX G
Douglas County Administrator Coordination

DOUGLAS COUNTY ADMINISTRATOR
1100 Massachusetts Street
Lawrence, KS 66044-3064
(785) 832-5328 Fax (785) 832-5148
cweinaug@douglas-county.com

G. Craig Weinaug
County Administrator

October 10, 2007

J. Michael Bowen, P.E.
Division Engineer, KS Division
Federal Highway Administration
6111 SW 29th Street, Suite 100
Topeka, KS 66614-4271

RE: letter addressed to Craig Weinaug dated August 27, 2007

Dear Mr. Bowen:

Thank you for the opportunity to provide current information to assist FHWA and KDOT in the completion of the Section 4(f) evaluation of the South Lawrence Trafficway project in Douglas County. We acknowledge and appreciate your concern that information used to complete the 4(f) evaluation be as complete and current as possible. The six questions posed in your letter of August 27th pertain to "the evaluation of indirect and cumulative impacts attributed to induced development caused by each of the alternatives". Prior to formulating responses to these questions, county staff was asked to do additional research into the recommendations of adopted planning documents and the status of planning documents and studies that are in the process of being finalized. This research was used to provide the framework for our responses. Staying in format with how the questions were originally submitted, our responses are presented after each of the six questions that were posed to the County.

1. **What type of growth is planned within the next 20 years south of 31st Street, between US 59 and E 1600 Road? What factors are being used to make this determination?**

   Two adopted comprehensive plans exist for the area south of 31st Street and south of the Wakarusa River – Horizon 2020[1] (H2020) and Transportation 2025[2] (T2025). Neither comprehensive plan anticipated significant transportation improvements or a wastewater treatment plant south of the Wakarusa River.

[1] Horizon 2020 is the Lawrence/Douglas County jointly adopted comprehensive land use plan. The plan applies to all unincorporated areas of the county and to land use planning in the city of Lawrence
[2] Transportation 2025 is the adopted Lawrence/Douglas County MPO's adopted comprehensive transportation plan.

Specific land use development recommendations are not made in H2020 for the unincorporated area (except Service Area 1); floodplain along the Wakarusa River; or, the area to the south of the river. Land use recommendations within the city limits – south of 31st street – are primarily for a continuation of the existing development patterns to the north of the roadway; extension is shown of the commercial corridor along S. Iowa/US 59 with transitional uses of office and/or medium density residential to the west of Louisiana Street and office/industrial uses to the east of Haskell Avenue. The Baker Wetlands are shown in all adopted plans as green space or open space as is the floodplain along the Wakarusa River and its tributaries.

T2025 is currently being revised and updated as the comprehensive transportation plan for 2030 (T2030). According to staff and minutes of the T2030 meetings, the proposed land use plan and population projections for T2030 took into consideration the development of a new wastewater treatment plant south of the Wakarusa River and the recommended 32B SLT alignment. The growth rate used in the population projections was based on historical growth trends and may or may not reflect the 2007 estimated growth figures that were recently released for Douglas County and Lawrence by the US Census Bureau. Projected land uses are not shown for the entire Urban Growth Area (UGA) south of the River. Specific land use projections appear to extend current urban development patterns along the transportation corridors for three major north-south streets that serve Lawrence (US 59, Louisiana, and Haskell Avenue). Along these transportation corridors, projected land uses in the proposed T2030 plan do not extend the full depth of the UGA to N 950 Road. [T2025's land use plan shows the majority of land uses south of the Wakarusa River as open space or low density residential with commercial nodes at the intersections of major roads.]

The major land use type shown on the future transportation/land use maps (adopted and proposed) is for some form of residential development – predominately low density residential. Based on some Traditional Neighborhood Development[3] (TND) designs proposed as part of the SmartCode[4] exercise conducted by Placemakers consultant group in 2006, TND developments are proposed along Louisiana Street and along Kasold Drive (extended south). These concept plans have been incorporated into the proposed T2030 land use map. There is no documentation or evidence that these land use and population projections took into consideration the cumulative impacts of development of a new wastewater treatment plant; eastern SLT connection; US 59 realignment/improvements; and, new rural development regulations on land use development patterns or the pace of development south of the Wakarusa River. Regardless of the lack of current planning documents to include this confluence of events, those involved in the development of these future planning

[3] Traditional Neighborhood Development is a comprehensive planning system that includes a variety of housing types and land uses in a defined area.

[4] SmartCode is a model design and development code released by Duany Plater-Zyberk and company in 2003 and is the only unified transect-based code available for all scales of planning.

documents agree that the cumulative impacts of all these events in the short horizon time of 5-10 years is significant and worthy of study.

Future commercial development locations are shown as nodes in Horizon 2020. For the portion of the Urban Growth Area south of 31st Street, the commercial chapter in H2020 proposes the addition of five new commercial nodes by 2020. Three of these commercial nodes are categorized as neighborhood centers, one is described as an automotive commercial center, and one is shown as a major commercial center (CC400)[5]. Of these five commercial nodes, only one is anticipated to occur east of US 59 and that is a neighborhood center at the intersection of Douglas County Route 1055 (Haskell Avenue) and N 1100 Road. Policies in H2020 would support the upgrading of this proposed commercial node to a major commercial center should the Alternative Alignment create an interchange at Douglas County Route 1055 (Haskell Avenue). The only major commercial center currently anticipated in Horizon 2020 is a CC400 center at the intersection of US 59 and Douglas County Route 458 (N 1000 Road). A regional commercial center is not anticipated in Horizon 2020 to occur within the planning period (2020). These commercial locations and types of development were based on no significant transportation improvements occurring to east-west roads south of the Wakarusa River. The impact of a new interchange, fully accessible to development (if it is outside the floodplain), has not been considered in these land use planning documents. The impact of a southern alignment of the SLT, such as the 42A Alternative Alignment would cause the assumptions, locations, and number of major commercial centers to be reconsidered based on development pressures that would be associated with the creation of a major intersection in an area where all four corner of the intersection could be developed. The modeling work currently being done by KDOT for T2030 to project future traffic volumes along the transportation network around Lawrence has relied on the 32B Preferred Alignment, being developed north of the Wakarusa River.

Studies and plans that are not adopted but are in some stage of development that include the areas adjacent to or south of 31st Street are the: Southern Development Plan, the Southeast Area Plan, Transportation 2030, a master plan for development of the area around the Wakarusa Treatment Plant, an update to the Parks & Recreation Master Plan, and on-going studies of the extension of 31st street to the east of Haskell Avenue.

2. What effect does the proposed wastewater treatment plan have on the current growth plans for the area south of 31st Street, between US 59 and E 1600 Road?

Prior to the approval of a wastewater treatment plant south of the Wakarusa River, urban densities of development were not planned to occur except for commercial

[5] CC400 is one of two types of community commercial centers identified in Horizon 2020. It can contain up to 400,000 gross square feet and takes its primary access from an arterial or collector street.

nodes at some major road intersections. The initial phase of the treatment plant south of the Wakarusa River is designed to provide relief to development pressures on the west side of Lawrence (and west of the SLT/K10), where existing neighborhoods are underserved or new development is limited by existing sanitary sewers capacities. Future phases of the Wakarusa Treatment Plant would open up the area south of the Wakarusa River to urban development densities. The only planning done to-date within the watershed area that the treatment plant will serve south of the river is in T2030's land use plan, and this only extends to N 950 Road. T2030's land use plan indicates the potential for development of urban residential densities could occur in portions of 9 square miles (by the end of the planning period, 2030) in the sections that are directly south of the floodplain. Urban development is projected to cover approximately 5,000 to 5,700 acres, excluding floodplain areas. Urban growth densities south of the Wakarusa River can be expected to accelerate when the new treatment facility is expanded or when another major improvement, such as the 42A alignment, are completed.

3. **How would an SLT alternative that has an alignment south of the Wakarusa River (42nd Street Alignment) and access to Haskell Avenue affect the current and future plans for the type of growth that is expected south of 31st Street?**

The 42A or Alternative Alignment south of the Wakarusa River will create a major intersection at Douglas County 1055 [Haskell Avenue]. Based on goals and policies in the commercial chapter (Chapter 6) of Horizon 2020, this intersection of a principal Arterial with a Freeway could provide a new or alternative location for the next regional commercial node. Currently, only a CC400 commercial node is proposed south of the Wakarusa River and it is proposed to be located approximately two miles to the west at US 59 and Douglas County Route 458 (N 1000 Road).

Commercial nodes are attractions for other types of land uses, including residential uses, and the likely result of a commercial node at Haskell Avenue would be a more mixed and dense urban population then the low density residential proposed on the T2030 land use map.

4. **How would an SLT alternative that has an alignment north of the Wakarusa River (32nd Street Alignment) and access at Haskell Avenue affect the current and future plans for the type of growth that is expected south of 31st Street?**

The Wakarusa River and its wide floodplain provide a significant natural barrier to the expansion of urban densities to the south of the River. Although the Wakarusa Treatment Plant will promote some urban densities of development south of the river, the major type of land use (as shown on both the adopted and proposed comprehensive transportation plans) is low density residential development.

The realignment of Haskell Avenue and the creation of a major interchange along Haskell could influence existing businesses that are relocated due to that intersection improvement to locate immediate to the south of the river and floodplain, particularly as the location of the treatment plant east of Haskell Avenue would be a deterrent to the development of residential neighborhoods east of Haskell Avenue and north of N 1100 Road.

5. How would a "No Build" SLT alternative affect the current and future plans for the type of growth that is expected south of 31st Street?

The "no build" alternative leaves the existing roadway network (and existing K10) to handle the increased traffic. The immediate and long-term impacts on this decision would have more immediate impacts on the timing and development of an improved and extended 31st Street east of Haskell Avenue – and on possible improvements to N 1100 Road or N 1000 Road – then on urban development south of 31st Street and/or the Wakarusa River. If the "no build" alternative were selected the area south and west of Louisiana and 31st Streets purchased for the Preferred Alignment, and formerly proposed for multiple family development, would likely be purchased by a developer interested in proposing a similar density or intensity of land use.

6. **Discuss the land use planning along 31st Street, Haskell Avenue and Louisiana Street, adjacent to the Haskell Agricultural Farm Property, and how likely it is to change if either or none of the SLT alternatives is constructed.**

The planning along 31st Street is based on it being a Principal Arterial in the city of Lawrence street network. Land uses proposed along this classification of road are similar throughout Lawrence. The rural character south of 31st Street, primarily influenced by the Baker Wetlands would continue for that portion of the corridor that lies between Louisiana Street and Haskell Avenue. Development west and northwest of Louisiana Street would likely be residential with significant areas retained for drainage easements along FEMA floodplains. The industrial and non-residential nature of land uses to the east of Haskell Avenue would not be likely to change, although over time some redevelopment of existing or similar types of uses would probably occur.

The improvement and extension of 31 Street from Haskell Avenue to O'Connell Road is in the 2008 Capital Improvements Plan for Lawrence. If neither alternative is selected and "no build" becomes the default selection, it is likely that the city and county commissions will turn to implementing the recommendations in the 2003 31st Street Corridor Study, which looked at 31st Street from Iowa to Douglas County Route 1057.

Discussion of the specific impacts of either the Preferred Alignment (32B) or the Alternative Alignment (42A) has already been addressed in the responses to questions 5 and 4, respectively.

The information provided in these responses is similar to the information that was available to FHWA and KDOT since beginning the Section 4(f) study, although several chapter updates have occurred to Horizon 2020 since 2004. The new influences on development south of 31st Street and south of the Wakarusa River come from the convergence of events that have occurred since 2004 – approval of a new wastewater treatment plant south of the Wakarusa River; approval and (on-going) construction of a realignment of US 59 Highway from Franklin County through Douglas County to N 1100 Road; adoption of more stringent rural development regulations within the UGA of Lawrence, and new development patterns proposed by the parallel Smart Code currently under consideration for adoption by the Lawrence City Commission.

If these responses need additional discussion, please feel free to contact me.

Sincerely,

G. Craig Weinaug
County Administrator